NYS 002 325 074
CA 89 - 03/89

March 1989

RCRA Facility Assessment (RFA) Report
for Lenox China, Inc.
Tilton Road, Pomona, New Jersey 08240

A. The Preliminary Assessment (PA) report prepared in January 1986 identified the following Solid Waste Management Units (SWMUs):

1. Glaze Basin - Investigations for potential releases from this unit to groundwater and soil are recommended. A RCRA Facility Investigation (RFI) is required.

2. Slip Basin - Investigations for potential releases from this unit to groundwater and soil are recommended. A RFI is required.

3. Polishing Lagoon - Investigations for potential releases from this unit to groundwater, surface water, and soil are recommended. A RFI is required.

4. Drum Storage Area (Drum Storage Pad) - No RFI is required.

5. Land Disposal of Sludge beneath Parking Area (Sludge Disposal Area) - Investigations for potential releases to groundwater and soil are recommended. A RFI is required.

6. Underground Effluent Transfer Pipe - Investigations for potential releases to groundwater and soil are recommended. A RFI is required.

B. A Visual Site Inspection (VSI) conducted in January 1986 observed those Solid Waste Management Units (SWMUs) identified in the PA report.

C. Additional Findings

1. Sludge Degreaser Pit - Trichloroethylene (TCE) sludges generated from the manufacturing building are collected at drums stationed in this unit. Filled drums are moved to the Drum Storage Area by a forklift. TCE releases from this unit were documented.

2. Waste Pile - During the closure of the Glaze Basin, contaminated materials (leaded glaze) in the west wall of the Glaze Basin was found. NJDEP determined that the contaminated materials are the waste in a separate unit.

3. Tilton Road Pond - The effluents from the Polishing Lagoon flow to this unit before a discharge to the surface water body. This unit is not lined and potential releases to soil and groundwater should be investigated during a RFI. A SWMU assessment is recommended.

4. Equalization Sump - The process wastewater was discharged to this sump before treatment in the industrial waste treatment plant or settlement of sludges in the Slip Basin. The unit was concrete walls and bottom, and located adjacent to the manufacturing plant. No information of releases is available for this unit. A SWMU assessment is recommended.

5. Vacuum Filter (Existing Vacuum Filter System) - Drawing No. 2 attached to the February 9, 1989 letter to Mr. Barry Tornick from Geraghty & Miller, Inc. shows that sludges from the clarifiers are filtered at this unit for dewatering. No information of releases from this unit is available. A SWMU assessment is required unless otherwise demonstrated to be no releases from this unit.

6. New Filter Press - Drawing No. 2 attached to the February 9 letter also shows that sludges from the new clarifier are filtered at this unit for dewatering. No information of releases from this unit is available. A SWMU assessment is required unless otherwise demonstrated to be no releases from this unit.

7. Piping - Figure 10B (Slip Basin Routing Diagram) on page A-25 of the PA report shows effluent transfer pipes connecting the Slip Basin, to the Polishing Basin, and to the Tilton Road Pond. No information of releases from this unit is available. A SWMU assessment is required.

8. Underground Storage Tanks - In December 1988, NJDEP informed EPA that the Lenox China facility had underground storage tanks located at the north of the manufacturing plant. The tanks were used for storing petroleum hydrocarbons (gasolins). The February 1989 letter indicated that these underground tanks were excavated in July 1987. Analytical data of the samples collected during the excavation from the sidewalls and the surface material at the bottom of excavation were attached in the letter. More detailed documentation for sampling locations, sampling procedures, analytical parameters, and analytical methods is required for demonstration of no releases. A SWMU assessment may be

required if documents are not sufficient to demonstrate no releases.

9. Areas of Stressed Vegetation - During the January 17, 1989 inspection conducted jointly by the U.S. Environmental Protection Agency (EPA) and the New Jersey Department of Environmental Protection (NJDEP), Areas at the north of the Slip Basin were covered with stressed vegetation. During the inspection, the representatives from Lenox indicated that surface waters at the site flow to the areas. A SWMU assessment is required.

D. Recommendations of the RFA Report

1. A full RCRA Facility Investigation (RFI) in soil and groundwater is necessary for the Sludge Degreaser Pit, the Sludge Disposal Area, and the Waste Pile;

2. A SWMU assessment is required for the Polishing Lagoon, the Tilton Road Pond, the Underground Effluent Transfer Pipe, the Equalization Sump, the Vacuum Filter, the New Filter Press, the Piping, the Underground Storage Tanks, and the Areas of Stressed Vegetation; and

3. Corrective actions for the Glaze Basin, the Slip Basin, and the Drum Storage Area will be addressed by State permits or closure approvals.

LENOX CHINA
Tilton Road
Pomona (Galloway Township)
Atlantic County, N.J.

The Lenox China plant, located on 56 acres in Atlantic County, is the largest fine china manufacturing facility in the United States. The factory operates on a continuous basis producing ceramic dinnerware and giftware.

Lenox manufactures the china by blending clay and alumino-silicates, which are coated or glazed with lead glass. Wastes containing leaded glaze have been stored on-site since plant operations began in 1954. Tests on waste materials indicate they contain hazardous waste (lead) as defined by the RCRA regulations.

The waste storage areas include several basins, a drum storage area, and an area where contaminated sludge was placed on the soil and paved over.

A constant check is kept on groundwater and surface water conditions on site by a series of monitor wells which are sampled and analysed quarterly. The surface water is also sampled and analysed.

Although some minor groundwater contamination (slightly elevated lead levels) was noted beneath the contaminated sludge applied to the soil, overall, the site is well maintained and well monitored. There is potential for contamination to move with the groundwater flow, but this writer feels this is highly unlikely given the nature of the contaminants (lead waste) and the fact that the lead is incorporated with low permeability clay.

Preliminary Assessment

for

RCRA Corrective Action Program

LENOX CHINA
Tilton Road
Pomona (Galloway Township)
Atlantic County, N.J.

N. J. Department of Environmental Protect
Divisions of Environmental Quality
Waste Management
Water Resources

Prepared by the Division of Waste Manage
Bureau of Hazardous Waste Planning &
Classification

November, 1989

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION
01 STATE | 02 SITE NUMBER

II. SITE NAME AND LOCATION

01 SITE NAME	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Lenox China	Tilton Road

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Pomona (Galloway Twsp)	NJ	08240	Atlantic	01	

09 COORDINATES LATITUDE	LONGITUDE	BLOCK	LOT
39° 29' 18"	74° 35' 52"	453	1

ACREAGE: 55.98

10 DIRECTIONS TO SITE (Starting from nearest public road)
From Trenton - Route 206 South to Route 30 East to Tilton Road, Lenox is on the left.

III. RESPONSIBLE PARTIES

01 OWNER (If known)	02 STREET (Business, mailing, residential)
Lenox China Division, Lenox, Inc.	Tilton Road

03 CITY	04 STATE	05 ZIP CODE	06 TELEPHONE NUMBER	
Pomona	NJ	08240	(609 641-3700	ext. 336

07 OPERATOR (If known and different from owner)	08 STREET (Business, mailing, residential)
A.J. Gustray - Director of Engineering	Tilton Road

09 CITY	10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER
Pomona	NJ	08240	( )

13 TYPE OF OWNERSHIP (Check one)
☒ A. PRIVATE ☐ B. FEDERAL: _____ (Agency Name) ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL
☐ F. OTHER _____ (Specify) ☐ G. UNKNOWN

14 OTHER SITE INFORMATION (Check all that apply)
☐ A. RCRA 3001 DATE RECEIVED 4 17 85 (Month Day Year) ☐ B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED ____/____/____ (Month Day Year) ☐ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION
☒ YES ☐ NO DATE several (Month Day Year)
BY (Check all that apply)
☐ A. EPA ☐ B. EPA CONTRACTOR ☒ C. STATE ☐ D. OTHER CONTRACTOR
☐ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER: _____
CONTRACTOR NAME(S): Geraghty and Miller, Inc.

02 SITE STATUS (Check one)	03 YEARS OF OPERATION	
☒ A. ACTIVE ☐ B. INACTIVE ☐ C. UNKNOWN	1954 (Beginning Year)	Present (Ending Year) ☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN OR ALLEGED
Lead, trichloroethylene, radionucleides
(Attachments A-2, A-6, B-1,2,3,4)

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION
Soil and groundwater contamination
(Attachments A-33,34,47)

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)
☐ A. HIGH (Inspection required promptly) ☐ B. MEDIUM (Inspection required) ☐ C. LOW (Inspection at time of other site visit) ☐ D. NONE (No further action needed unless conditions change)

VI. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NUMBER
Ken Siet	NJDEP-DWR	(609) 292-0424

04 PERSON RESPONSIBLE FOR ASSESSMENT	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NUMBER	08 DATE
Neil Jiorle	HSMA	NJDEP-DWM	609) 984-3239	~~1 15 86~~

EPA FORM 2070-12 (7-81)

I. BASIC PRC SS/UNIT CHARACTERISTICS

	1) SWMU TYPE	2) LOCATION	UNITS OF THIS TYPE	4) SIZE	KNOWN OR 5) ALLEGED	RCRA/ NPDES 6) STATUS	COMPLIANCE 7) HISTORY	ERRIS 8) INFO	9) COMMENT
A. Landfill									
B. Surface Impoundment									
C. Waste Pile	X		3		Known			yes	
D. Land Treatment Unit	X	K-7	1		Known	N/A		yes	
E. Injection Well									
F. Incinerator									
TANKS									
G.1 Above Ground									
G.2 Underground									
H. Container Storage Unit	X Drum Storage Pad	I-9	6 drums	ea. 30 gal	Known			yes	
I. Other	Underground Effluent Transfer Pipe	I-8,9	1	Unknown	Known	N/A		no	

ADDITIONAL COMMENTS

SWMU TYPE	COMMENT
B.1 Glazer Basin	Location I-10, Size - 60' x 90' x 6'. RCRA Facility Permit No. NJD002325074. Surface impoundment formerly used as a primary settling basin. Presently not used--being decommissioned.
B.2 Slip Basin	Location I-7, J-7. Size - 100' x 200' x 7'. RCRA Facility Permit No. NJD002325074. Surface impoundment used as a settling basin for process wastes containing less than 2% lead.
B.3 Polishing Lagoon	Location H-3. Approximate Size - 60' x 90' x 6'. Not a RCRA regulated unit. Detention lagoon--lead levels are non existent to negligent.
H.1 Drum Storage Pad	Location I-9. Area is paved with an impermeable material and designed to trap and recycle spilled wastes. Six-30 gallon drums of trichloroethylene waste sludge are stored here.

ADDITIONAL COMMENTS

SWMU TYPE	COMMENT
D.1 Land disposal of sludge beneath parking area	Location K-7. Approximately 200' x 200'. Waste sludge containing lead was dredged from slip basin and placed here, then covered with asphalt for use as a parking area.
I. Underground Effluent Transfer Pipe	Location I-8,9. Approximately 200' long section of pipe used to transfer liquids from glaze basin to slip basin.

SOLID WASTE MANAGEMENT UNIT B.1 Glaze Basin LOCATION I-10

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

IDENTIFICATION
01 STATE | 02 SITE NUMBER

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)
- [X] A. SOLID
- [ ] B. POWDER, FINES
- [X] C. SLUDGE
- [ ] D. OTHER (Specify)
- [ ] E. SLURRY
- [X] F. LIQUID
- [ ] G. GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)
- TONS 1600
- CUBIC YARDS
- NO OF DRUMS

03 WASTE CHARACTERISTICS (Check all that apply)
- [X] A. TOXIC
- [ ] B. CORROSIVE
- [ ] C. RADIOACTIVE
- [X] D. PERSISTENT
- [ ] E. SOLUBLE
- [ ] F. INFECTIOUS
- [ ] G. FLAMMABLE
- [ ] H. IGNITABLE
- [ ] I. HIGHLY VOLATILE
- [ ] J. EXPLOSIVE
- [ ] K. REACTIVE
- [ ] L. INCOMPATIBLE
- [ ] M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS			
PSO	PESTICIDES			Leaded glaze - total lead content between 35 and 40 percent (lead waste-EPA Hazardous Waste No. D008) stored in glaze basin.
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS	1600	tons	

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
MES	Lead Waste	7439-92-1	Surface Impoundment-glaze basin. Formerly used as a primary settling basing. Now being decommissioned.		
MES	Frit (lead/glass compds)	7439-92-1			

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sampling results)

Attachments A-4, 29,30,31 - Geraghty and Miller - Lenox Site Engineering Report.

SOLID WASTE MANAGEMENT UNIT Glaze Basin B.1 LOCATION I-10

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE | 02 SITE NUMBER

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 [X] A. GROUNDWATER CONTAMINATION — 02 [ ] OBSERVED (DATE: _____) — [X] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Potential exists for lead waste to leach through the bottom of the basin and enter the groundwater (Attachments A-4,29,30,31,I)

05 Relationship to other SMU's: Discharged waste water to slip basin.

01 [ ] B. SURFACE WATER CONTAMINATION — 02 [ ] OBSERVED (DATE: _____) — [ ] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

No potential exists.

05 Relationship to other SMU's:

01 [ ] C. CONTAMINATION OF AIR — 02 [ ] OBSERVED (DATE: _____) — [ ] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

No potential exists.

05 Relationship to other SMU's:

01 [ ] D. FIRE/EXPLOSIVE CONDITIONS — 02 [ ] OBSERVED (DATE: _____) — [ ] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

No potential exists

03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

There is a very limited potential, if any, for direct contact with glaze basin contents by plant employees. (Attachments A-31, H)

05 Relationship to other SMU's:

01 [X] F. CONTAMINATION OF SOIL — 02 [ ] OBSERVED (DATE: _____) — [X] POTENTIAL — [ ] ALLEGED
03 AREA POTENTIALLY AFFECTED: _____ (Acres) — 04 NARRATIVE DESCRIPTION

Potential exists for lead waste to leach into the soil through the bottom of the basin. (Attachments A-4,29,30,31,I)

05 Relationship to other SMU's: Discharge water to slip basin.

01 [X] G. DRINKING WATER CONTAMINATION — 02 [ ] OBSERVED (DATE: _____) — [X] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED _____ — 04 NARRATIVE DESCRIPTION

Potential exists for private wells in the area (66 wells within one square mile) to become contaminated. (Attachments A-15, 47, J)

05 Relationship to other SMU's:

01 [X] H. WORKER EXPOSURE/INJURY — 02 [ ] OBSERVED (DATE: _____) — [X] POTENTIAL — [ ] ALLEGED
03 WORKERS POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Potential for worker exposure during waste glaze removal and recycling operations or during unit closure (Attachments A-4,31,32)

01 [X] I. POPULATION EXPOSURE/INJURY — 02 [ ] OBSERVED (DATE: _____) — [X] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Potential exists via contact with contaminated groundwater. (Attachments H,I)

05 Relationhsip to other SMU's:

SOLID WASTE Glaze Basin
MANAGEMENT UNIT B.1 LOCATION I-10

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE | 02 SITE NUMBER

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) — 03 ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

No potential exists

05 Relationship to other SMU's:

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

No potential exists

05 Relationship to other SMU's:

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE _____) — ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

No potential exists

05 Relationship to other SMU's:

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES — 02 ☐ OBSERVED (DATE _____) — ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

Potential unstable containment since basin is not lined. (Attachments A-4,30,31, I)

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE _____) — ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

No potential exists as a direct result of this basin. (Attachment H)

05 Relationship to other SMU's:

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE _____) — ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A

05 Relationship to other SMU's:

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE _____) — ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

An underground pipe formerly carried waste liquid from glaze basin to slip basin. The integrity of this pipe cannot be verified. (Attachment H)

III. TOTAL POPULATION POTENTIALLY AFFECTED: _____

IV. COMMENTS

This unit is currently closed. The company intends to completely close this unit according to their RCRA Subpart G Closure Plan after the remaining glaze waste is removed for recycling.

V. SOURCES OF INFORMATION

Attachment A - Geraghty and Miller - Lenox Site Engineering Report.
Attachment H - Lenox On Site Inspection (OSI) - N. Jiorle
Attachment I - Memo to Lenox File regarding permeability Tests - N. Jiorle.

EPA FORM 2070-12 (7-81)

SOLID WASTE MANAGEMENT UNIT Slip Basin B.2 LOCATION I-7, J-7

EPA

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- [X] A SOLID
- [ ] B POWDER, FINES
- [X] C SLUDGE
- [ ] D OTHER _____
- [ ] E SLURRY
- [ ] F LIQUID
- [ ] G GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

TONS _____

CUBIC YARDS _____

NO OF DRUMS _____

03 WASTE CHARACTERISTICS (Check all that apply)

- [X] A TOXIC
- [ ] B CORROSIVE
- [ ] C RADIOACTIVE
- [X] D PERSISTENT
- [ ] E SOLUBLE
- [ ] F INFECTIOUS
- [ ] G FLAMMABLE
- [ ] H IGNITABLE
- [ ] I HIGHLY VOLATILE
- [ ] J EXPLOSIVE
- [ ] K REACTIVE
- [ ] L INCOMPATIBLE
- [ ] M NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			Waste materials with a total lead content of less than 2 percent (EPA Hazardous Waste No. D008) impounded here.
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS	unknown		

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
MES	Lead	7439-92-1	Surface Impoundment-		
MES	Frit (lead/glass compounds)	7439-92-1	Slip Basin		
	Nepheline syenite (feldspar)	999	Secondary settling basin		

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g. state files, sampling results)

Attachments A-5,26,27,28 - Geraghty and Miller - Lenox Site Engineering Report.

EPA FORM 2070-12 (7-81)

SOLID WASTE MANAGEMENT UNIT Slip Basin B.2 LOCATION I-7, J-7

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE | 02 SITE NUMBER

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 [X] A. GROUNDWATER CONTAMINATION — 02 [ ] OBSERVED (DATE: _____) — [X] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Potential exists for lead waste to leach through the bottom of the basin and enter the groundwater (1) (Attachments A-5, I)
05 Relationship to other SMU's: Received waste from Unil B.1 - Discharges to Unit B.3

01 [ ] B. SURFACE WATER CONTAMINATION — 02 [ ] OBSERVED (DATE: _____) — [ ] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

No potential exists. (1)
05 Relationship to other SMU's:

01 [ ] C. CONTAMINATION OF AIR — 02 [ ] OBSERVED (DATE: _____) — [ ] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

No potential exists (1)
05 Relationship to other SMU's:

01 [ ] D. FIRE/EXPLOSIVE CONDITIONS — 02 [ ] OBSERVED (DATE: _____) — [ ] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED _____ — 04 NARRATIVE DESCRIPTION

No potential exists (1)

01 [X] E. DIRECT CONTACT — 02 [ ] OBSERVED (DATE: _____) — [X] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED _____ — 04 NARRATIVE DESCRIPTION

Potential exists for direct contact with Slip Basin contacts by plant employees. (1) (Attachments A-25, H)
05 Relationship to other SMU's:

01 [X] F. CONTAMINATION OF SOIL — 02 [ ] OBSERVED (DATE: _____) — [X] POTENTIAL [ ] ALLEGED
03 AREA POTENTIALLY AFFECTED: _____ (Acres) — 04 NARRATIVE DESCRIPTION

Potential exists for lead waste to leach into soil through the bottom of the basin. (1) (Attachments A-5,I)
05 Relationship to other SMU's: Discharges to Unit B.3

01 [ ] G. DRINKING WATER CONTAMINATION — 02 [ ] OBSERVED (DATE: _____) — [ ] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED _____ — 04 NARRATIVE DESCRIPTION

No potential exists (1)
05 Relationship to other SMU's:

01 [X] H. WORKER EXPOSURE/INJURY — 02 [ ] OBSERVED (DATE: _____) — [X] POTENTIAL [ ] ALLEGED
03 WORKERS POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Potential exists for worker exposure to materials in the Slip Basin. (1) (Attachment A-25, H)

01 [ ] I. POPULATION EXPOSURE/INJURY — 02 [ ] OBSERVED (DATE: _____) — [ ] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED _____ — 04 NARRATIVE DESCRIPTION

There is no general public access to this area of the Lenox Plant (1) (Attachment H)

05 Relationhsip to other SMU's:

SOLID WASTE MANAGEMENT UNIT Slip Basin B.2 LOCATION I-7, J-7

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE | 02 SITE NUMBER

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☒ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) — 03 ☒ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Leaks or overflows of contaminated materials occurring in a northwesterly direction could result in contamination of flora.
05 Relationship to other SMU's: (Attachments A-5,26,27,28,H)

01 ☒ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE _____) — ☒ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include species if known)

Unit is open to access by wildlife. Contact with lagoon liquids could potentially result in contamination. (Attachments A-5,26,27,28,H)

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE _____) — ☐ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION

No potential exists.
05 Relationship to other SMU's:

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES (Spills, runoff, standing liquids, leaking drums) — 02 ☐ OBSERVED (DATE _____) — ☒ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

Potential unstable containment since the lagoon is not lined. (Attachments H,I)

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE _____) — ☐ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION

No potential exists as a direct result of this basin. (Attachment H)
05 Relationship to other SMU's:

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE _____) — ☐ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A
05 Relationship to other SMU's:

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE _____) — ☐ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

An underground pipe formerly carried waste liquid from the glaze basin to the slip basin. The integrity of this pipe cannot be verified. (Attachment H)

III. TOTAL POPULATION POTENTIALLY AFFECTED: _____

IV. COMMENTS

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Attachment A - Geraghty and Miller - Lenox Engineering Report
Attachment H - Lenox On Site Inspection (OSI) - N. Jiorle
Attachment I - Memo to Lenox File regarding permeability tests - N. Jiorle.

SOLID WASTE Polishing Lagoon
MANAGEMENT UNIT B.3 LOCATION H-3

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)
- A SOLID
- B POWDER, FINES
- C SLUDGE
- D OTHER _____ (Specify)
- E SLURRY
- F LIQUID
- G GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)
- TONS _____
- CUBIC YARDS _____
- NO OF DRUMS _____

03 WASTE CHARACTERISTICS (Check all that apply)
- A TOXIC
- B CORROSIVE
- C RADIOACTIVE
- D PERSISTENT
- E SOLUBLE
- F INFECTIOUS
- G FLAMMABLE
- H IGNITABLE
- I HIGHLY VOLATILE
- J EXPLOSIVE
- K REACTIVE
- L INCOMPATIBLE
- M NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS	unknown		

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
MES	Lead Waste	7439-92-1	This is a clarifier near the end of the Industrial Waste Treatment process. Waste entering this lagoon contains less than 1.0 ppm lead.		

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Attachment E-3 Geraghty and Miller Waste Facility Report

EPA FORM 2070-12 (7-81)

SOLID WASTE MANAGEMENT UNIT Polishing Lagoon P-3 LOCATION H-3

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE | 02 SITE NUMBER

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Potential exists for lead waste to leach through the bottom of the lagoon and enter groundwater. (Attachments A-25, E)

05 Relationship to other SMU's: Receive wastewater from slip basin.

01 ☒ B. SURFACE WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Waste water receives final clarification here and is discharged to pond and stream. Waste water containing elevated lead levels could potentially be discharged to these receiving waters. (Attachments A-25,E,H)

01 ☐ C. CONTAMINATION OF AIR — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

No potential exists.

05 Relationship to other SMU's:

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

No potential exists.

03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

This lagoon is located well within property boundaries. Therefore, limited access is available for direct contact. (Attachments A-25,H)

05 Relationship to other SMU's:

01 ☒ F. CONTAMINATION OF SOIL — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: _____ (Acres) — 04 NARRATIVE DESCRIPTION

Potential exists for lead waste to leach into the soil through the bottom of the lagoon. (Attachments A-25,H,I)

05 Relationship to other SMU's: ~~Receives waste water from slip basin~~

01 ☐ G. DRINKING WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

No potential exists

05 Relationship to other SMU's:

01 ☒ H. WORKER EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Potential exists for employees to contact waste water in lagoon. (Attachment H)

01 ☐ I. POPULATION EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

This lagoon is located well within property boundaries. Therefore, limited access is available for population exposure. (Attachments A-25,H)

05 Relationhsip to other SMU's:

SOLID WASTE Polishing Lagoon
MANAGEMENT UNIT 8.3 LOCATION H-3

EPA — POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE | 02 SITE NUMBER

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ J DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) — 03 ☒ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Leaks or overflows of contaminated liquids could result in contamination of flora.
05 Relationship to other SMU's: (Attachment H)

01 ☒ K DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Unit is open to access by wildlife. Contact with lagoon liquids could potentially result in contamination. (Attachment H)
05 Relationship to other SMU's:

01 ☐ L CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE _____) — ☐ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION

No potential exists
05 Relationship to other SMU's:

01 ☒ M UNSTABLE CONTAINMENT OF WASTES — 02 ☐ OBSERVED (DATE _____) — ☒ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

Potential unstable containment since the lagoon is not lined. (Attachment H)

01 ☒ N DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE _____) — ☒ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION

There is potential for higher than indicated (1 ppm) amounts of lead to be released from this lagoon to pond and drainage ditch. (Attachments A-25,H)

01 ☐ O CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE _____) — ☐ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A
05 Relationship to other SMU's:

01 ☐ P ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE _____) — ☐ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

There is potential for higher than indicated (1ppm) amounts of lead to enter the Polishing Lagoon. (Attachments A-23,25,H)

III. TOTAL POPULATION POTENTIALLY AFFECTED: _____

IV. COMMENTS

Due to a series of checks and control mechanisms, it is highly unlikely that there would be a discharge from this unit that would contain elevated lead levels.

V. SOURCES OF INFORMATION

Attachment A - Geraghty and Miller - Lenox Site Engineering Report
Attachment E - G and M Waste Facility Report
Attachment H - Lenox On Site Inspection (OSI) - N. Jiorle

EPA FORM 2070-12 (7-81)

Attachment I - Memo to Lenox File regarding permeability Tests - N. Jiorle.

SOLID WASTE MANAGEMENT UNIT H.1 DRUM STORAGE AREA
LOCATION I-9

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE | 02 SITE NUMBER

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) — 03 ☐ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION

No potential exists.

05 Relationship to other SMU's:

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE _____) — ☐ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION

No potential exists.

05 Relationship to other SMU's:

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE _____) — ☐ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION

No potential exists.

05 Relationship to other SMU's:

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES — 02 ☐ OBSERVED (DATE _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

No evidence of unstable containment. Area is well designed for containment purposes. (Attachment H-1)

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE _____) — ☐ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION

No potential exists.

05 Relationship to other SMU's:

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE _____) — ☐ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A

05 Relationship to other SMU's:

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE _____) — ☐ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: _____

IV. COMMENTS

See attached page.

V. SOURCES OF INFORMATION

Attachment A - Geraghty and Miller - Lenox Site Engineering Report
Attachment G - Sax Manual - Trichloroethylene
Attachment H - Lenox On Site Inspection (OSI) - N. Jiorle

EPA FORM 2070-12 (7-81)

COMMENTS

This area was well designed for the purpose of drum storage. It is paved with an impermeable material that drains to a small pit with a sump. The area appears clean and free of stains that would indicate any spills.

SOLID WASTE MANAGEMENT UNIT D.1 Parking Lot Northeast of Slip Basin LOCATION K-7

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- [ ] A. SOLID
- [ ] B. POWDER, FINES
- [X] C. SLUDGE
- [ ] D. OTHER _____ (Specify)
- [ ] E. SLURRY
- [ ] F. LIQUID
- [ ] G. GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

TONS _____

CUBIC YARDS _____

NO. OF DRUMS _____

03 WASTE CHARACTERISTICS (Check all that apply)

- [X] A. TOXIC
- [ ] B. CORROSIVE
- [ ] C. RADIOACTIVE
- [X] D. PERSISTENT
- [ ] E. SOLUBLE
- [ ] F. INFECTIOUS
- [ ] G. FLAMMABLE
- [ ] H. IGNITABLE
- [ ] I. HIGHLY VOLATILE
- [ ] J. EXPLOSIVE
- [ ] K. REACTIVE
- [ ] L. INCOMPATIBLE
- [ ] M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			Waste sludge containg lead was removed from slip basin and spread on soil adjacent to slip basin to the northeast. This area was eventually paved over and used as a parking lot.
OLW	OILY WASTE			
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS	unknown		

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
MES	Lead Sludge	7439-92-1	Land Farm	60	ppm

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Attachments A-33,34,35,37,38,39,40,41,47 - Geraghty and Miller - Lenox Site Engineering Report.

EPA FORM 2070-12 (7-81)

SOLID WASTE MANAGEMENT UNIT D.1 Parking Lot Northeast of Slip Basin
LOCATION K-7

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE | 02 SITE NUMBER

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 [X] A. GROUNDWATER CONTAMINATION
02 [X] OBSERVED (DATE 11/82) [ ] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED:
04 NARRATIVE DESCRIPTION

Analysis of groundwater sample taken from monitor well located in this area indicate lead contamination. (Attachments A-15,33,34,45,47,50)
05 Relationship to other SMU's: Dredge wastes from Slip Basin were placed here.

01 [ ] B. SURFACE WATER CONTAMINATION
02 [ ] OBSERVED (DATE) [ ] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED:
04 NARRATIVE DESCRIPTION

No potential exists.

05 Relationship to other SMU's:

01 [ ] C. CONTAMINATION OF AIR
02 [ ] OBSERVED (DATE) [ ] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED:
04 NARRATIVE DESCRIPTION

No potential exists
05 Relationship to other SMU's:

01 [ ] D. FIRE/EXPLOSIVE CONDITIONS
02 [ ] OBSERVED (DATE) [ ] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED:
04 NARRATIVE DESCRIPTION

No potential exists

03 POPULATION POTENTIALLY AFFECTED:
04 NARRATIVE DESCRIPTION

This area is completely paved over, eliminating the potential for direct contact. (Attachments A-33,35,H)

05 Relationship to other SMU's:

01 [X] F. CONTAMINATION OF SOIL
02 [X] OBSERVED (DATE 11/82) [ ] POTENTIAL [ ] ALLEGED
03 AREA POTENTIALLY AFFECTED: (ACRES)
04 NARRATIVE DESCRIPTION

Contaminated dredge wastes from the slip basin were spread onto the soil in this area. (Attachments A-33,38,39,40,41)

05 Relationship to other SMU's:

01 [X] G. DRINKING WATER CONTAMINATION
02 [ ] OBSERVED (DATE) [X] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED:
04 NARRATIVE DESCRIPTION

Potential exists for private wells in the area (66 wells within one square mile) to become contaminated. (Attachments A-15,47, J)

05 Relationship to other SMU's:

01 [ ] H. WORKER EXPOSURE/INJURY
02 [ ] OBSERVED (DATE) [ ] POTENTIAL [ ] ALLEGED
03 WORKERS POTENTIALLY AFFECTED:
04 NARRATIVE DESCRIPTION

No potential exists

01 [X] I. POPULATION EXPOSURE/INJURY
02 [ ] OBSERVED (DATE) [X] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED:
04 NARRATIVE DESCRIPTION

Potential exposure via contact with contaminated groundwater (Attachments A-15,47,J)

05 Relationhsip to other SMU's:

SOLID WASTE Parking Lot Northeast of Slip Basin
MANAGEMENT UNIT D.1 LOCATION K-7

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE | 02 SITE NUMBER

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) — 03 ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

No potential exists.

05 Relationship to other SMU's:

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

No potential exists.

05 Relationship to other SMU's:

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

No potential exists.

05 Relationship to other SMU's:

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES — 02 ☒ OBSERVED (DATE 11/82) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

Contaminated dredge waters from the slip basin were spread onto the soil in this area. (Attachments A33,34,35)

01 ☒ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Potential exists for contamination to migrate offsite via groundwater (Attachment A-47)

05 Relationship to other SMU's:

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A

05 Relationship to other SMU's:

01 ☒ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Spreading contaminated dredge wastes onto the ground may have constituted an illegal/unauthorized action. (Attachment A-33,34, 35)

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: _____

IV. COMMENTS

Since this area is covered by an asphalt parking lot, the amount of rainwater intrusion is reduced, which in turn reduces the amount of water flowing through the contamination, minimizing waste migration in the groundwater.

V. SOURCES OF INFORMATION

Attachment A - Geraghty and Miller - Lenox Site Engineering Report.
Attachment H - Lenox On Site Inspection (OSI) - N. Jiorle
Attachment J - Memo to Lenox File - Private Wells in area - N. Jiorle.

SOLID WASTE MANAGEMENT UNIT I — Underground Effluent Transport Pipe
LOCATION I-8,9

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION
01 STATE | 02 SITE NUMBER

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)
☐ A. SOLID ☐ E. SLURRY
☐ B. POWDER, FINES ☐ F. LIQUID
☐ C. SLUDGE ☐ G. GAS
☐ D. OTHER _____ (Specify)

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)
TONS _____
CUBIC YARDS _____
NO. OF DRUMS _____

03 WASTE CHARACTERISTICS (Check all that apply)
☐ A. TOXIC ☐ E. SOLUBLE ☐ I. HIGHLY VOLATILE
☐ B. CORROSIVE ☐ F. INFECTIOUS ☐ J. EXPLOSIVE
☐ C. RADIOACTIVE ☐ G. FLAMMABLE ☐ K. REACTIVE
☐ D. PERSISTENT ☐ H. IGNITABLE ☐ L. INCOMPATIBLE
☐ M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
MES	Lead Waste	7439-92-1	Liquids in glaze basin were transferred to the slip basin via this pipe.		

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sampling results)

Attachment H - Lenox On Site Inspection (OSI) - N. Jiorle

SOLID WASTE MANAGEMENT UNIT I — Underground Effluent Transfer Pipe — LOCATION I-8,9

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE | 02 SITE NUMBER

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 [X] A. GROUNDWATER CONTAMINATION — 02 [ ] OBSERVED (DATE: _____) — [X] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Potential exists for contaminated liquids to leak from pipe into groundwater (Attachment H).

05 Relationship to other SMU's: carried waste water between glaze and slip basin.

01 [ ] B. SURFACE WATER CONTAMINATION — 02 [ ] OBSERVED (DATE: _____) — [ ] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

No potential exists

05 Relationship to other SMU's:

01 [ ] C. CONTAMINATION OF AIR — 02 [ ] OBSERVED (DATE: _____) — [ ] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

No potential exists

05 Relationship to other SMU's:

01 [ ] D. FIRE/EXPLOSIVE CONDITIONS — 02 [ ] OBSERVED (DATE: _____) — [ ] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

No potential exists

03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

No potential exists

05 Relationship to other SMU's:

01 [X] F. CONTAMINATION OF SOIL — 02 [ ] OBSERVED (DATE: _____) — [X] POTENTIAL [ ] ALLEGED
03 AREA POTENTIALLY AFFECTED: _____ (acres) — 04 NARRATIVE DESCRIPTION

Potential exists for contaminated liquids to leak from pipe into soil. (Attachment H)

05 Relationship to other SMU's: Carried waste water between glaze and slip basins

01 [X] G. DRINKING WATER CONTAMINATION — 02 [ ] OBSERVED (DATE: _____) — [X] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Potential exists for contaminated liquids to leak from pipe, enter groundwater and to be transported to nearby private wells. (Attachments H,I)

05 Relationship to other SMU's:

01 [ ] H. WORKER EXPOSURE/INJURY — 02 [ ] OBSERVED (DATE: _____) — [ ] POTENTIAL [ ] ALLEGED
03 WORKERS POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

No potential exists

01 [X] I. POPULATION EXPOSURE/INJURY — 02 [ ] OBSERVED (DATE: _____) — [X] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Potential exists via contact with contaminated groundwater (Attachments H,I)

05 Relationhsip to other SMU's:

SOLID WASTE Underground Effluent Transfer Pipe
MANAGEMENT UNIT I LOCATION I-8,9

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE | 02 SITE NUMBER

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

No potential exists

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include species of concern)

No potential exists

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

No potential exists

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES (Spills/runoff/standing liquids/leaking drums) — 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

Potential exists since integrity of pipe cannot be verified. (Attachment H)

01 ☒ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
NARRATIVE DESCRIPTION

No potential exists as a direct result of this pipe. (Attachment H)

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: _____

IV. COMMENTS

Upon direct questioning, the plant manager was unable to provide information on the integrity of this pipe.

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Attachment H - Lenox On Site Inspection (OSI) - N. Jiorle.
Attachment I - Memo to Lenox File regarding permeability tests - N. Jiorle.

EPA FORM 2070-12 (7-81)

SOLID WASTE Drum Storage Area
MANAGEMENT UNIT H.1 LOC

EPA

POTENTIAL HAZA[illegible]TE SITE
PRELIMINARY A[illegible]NT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION
01 STATE | 02 SITE NUMBER

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)
☐ A. SOLID ☐ E. SLURRY
☐ B. POWDER, FINES ☒ F. LIQUID
☐ C. SLUDGE ☐ G. GAS
☐ D. OTHER _____ (Specify)

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)
TONS _____
CUBIC YARDS _____
NO OF DRUMS 6

03 WASTE CHARACTERISTICS (Check all that apply)
☐ A. TOXIC ☐ E. SOLUBLE ☒ I. HIGHLY VOLATILE
☐ B. CORROSIVE ☐ F. INFECTIOUS ☐ J. EXPLOSIVE
☐ C. RADIOACTIVE ☐ G. FLAMMABLE ☐ K. REACTIVE
☐ D. PERSISTENT ☐ H. IGNITABLE ☐ L. INCOMPATIBLE
☐ M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS	180	gallons	waste TCE storage
PSO	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
SOL	Trichloroethylene	79-01-6	Drum Storage	19,000	ppm

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Attachments A-6, A-10 - Geraghty and Miller - Lenox Site engineering report
Attachment C-5 - DEP-DWM-RCRA Inspection Form - M. Jernigan

EPA FORM 2070-12 (7-81)

SOLID WASTE DRUM STORAGE AREA
MANAGEMENT UNIT H.1 LOCATION

EPA

POTENTIAL HAZARDOUS WA[illegible]
PRELIMINARY ASSESSM[illegible]
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIO[illegible] INCIDENTS

I. IDENTIFICATION
01 STATE | 02 SITE NUMBER

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☐ A. GROUNDWATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

No potential exists

05 Relationship to other SMU's:

01 ☐ B. SURFACE WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

No potential exists

05 Relationship to other SMU's:

01 ☒ C. CONTAMINATION OF AIR — 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

Minimal potential exists during drum filling operations. Drums are tightly sealed at all other times.

(Attachment A-19)

05 Relationship to other SMU's.

01 ☒ D. FIRE/EXPLOSIVE CONDITIONS — 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

Potential for fire exists since trichloroethylene is a flammable substance.

(Attachment G-1)

☒ [illegible] — [illegible] ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

Potential exists for employee contact during transfer operations.

05 Relationship to other SMU's: (Attachments A-19, 20, H-1)

01 ☐ F. CONTAMINATION OF SOIL — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: _____ (Acres) 04 NARRATIVE DESCRIPTION

No potential exists

05 Relationship to other SMU's:

01 ☐ G. DRINKING WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

No potential exists

05 Relationship to other SMU's:

01 ☒ H. WORKER EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

Potential exists for worker exposure during transfer operations.

(Attachments A-19,20,H-1)

01 ☐ I. POPULATION EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

This area is located well within property boundaries, therefore, limited access is available for population exposure.

05 Relationship to other SMU's" (Attachments A-12, H-1)

EPA FORM 2070-12 (7-81)

I. DOCUMENTS REVIEWED

	DOCUMENT NAME	DATE	AUTHOR	LOCATION	NO. PAGES
1.	RCRA Part B Permit Application	11/82	Geraghty & Miller Inc.	DEP-DWR Trenton	48
2.	RCRA Inspection Enforcement Memo	1/11/85	James Hamilton	DEP-DWR-Trenton	5
3.	NJDEP Inspection-Lenox China	9/25/84	Mary Jernigan	DEP-DWM-Red Lion	6
4.	NJDEP Inspection-Lenox China	2/23/84	Bruce Venner	DEP-DWM-Red Lion	5
5.	Waste Facility Report	Unknown	Geraghty & Miller,Inc.	DEP-DWM-Red Lion	3
6.	NJDEP Inspection-Lenox China	2/2/83	William Lowry	DEP-DWM-Red Lion	4
7.	Sax Manual-6th Edition	1984	N. Irving Sax	DEP-DWM-HSMA-Trenton	1
8.	On Site Inspection-Lenox	1/8/86	Neil Jiorle	DEP-DWM-HSMA-Trenton	2
9.	Memo to File Permeability	12/85	Neil Jiorle	DEP-DWM-HSMA	
10.	Memo to File-Private Wells	12/85	Neil Jiorle	DEP-DWM-HSMA	
11.					
12.					
13.					
14.					
15.					

II. OFFICES CONTACTED

	OFFICE	CONTACT NAME	CONTACT TELE. NO.	CONTACT DATE
1.	DEP-DWR	Ken Siet	609-292-0424	12/85
2.	DEP-DWM-Haz.Waste Engr.	Frank Coolick, Scott Baker	609-292-9880	12/85
3.	DEP-DWR	Kathy Locaine	609-633-6620	12/85
4.	DEP-DWM-Red Lion	Tom Downey	609-859-3373	12/85
5.	DEP-DWM-HSMA	Fred Schmitt	609-633-7282	12/85
6.	Atlantic County Health Dept.	Marilyn Gerhardt	609-645-7700	12/85
7.	DEP-DWR	Carol Lucy	609-984-6831	12/85
8.				
9.				
10.				

I. Conclusions and Recommendations

A. Conclusions - Please see attached recommendations

01 Is there sufficient information to conclude that no releases have occurred?

(yes/no) _____

02 Comment

03 Identify units which have not had releases.

04 Is there sufficient evidence to conclude that releases have potentially occurred?

(yes/no) _____

05 Comment

06 Identify units which probably have had releases.

07 Is there sufficient evidence to conclude that releases have occurred and are well documented?

(yes/no) _____

08 Comment

09 Identify units which have had documented releases.

B. Recommendations

01 The Facility has priority for site investigation

(yes/no) _____

02 Priority is:

high
medium
low

03 The facility should be required to perform an RI/FS prior to completion of the SI.

(yes/no) _____

04 Basis for the RI/FS is as follows:

05 The facility should be referred to enforcement for priority resolution of the following environmental/potential public health problem:

The above conclusions and recommendations are accepted for purposes of the Completion of RCRA PA requirements.

Signed:

_____ _____
HSMA (preparer) (Date)

_____ _____
DWM-BHWE (Date)

_____ _____
DWR (Date)

_____ _____
DWM-BHWP&C (Date)

Conclusions and Recommendations

On Thursday, January 23, 1986 a meeting was held to discuss the findings of the Preliminary Assessment (PA) and Site Inspection (SI) performed at Lenox China relative to the RCRA Subtitle C Grant, and to make recommendations based on those findings. Attending the meeting were representatives from NJDEP Division of Water Resources, Division of Waste Management-Solid Waste Administration, Bureau of Hazardous Waste Planning and Classification, and Hazardous Site Mitigation Administration.

It was determined from the PA and SI that, overall, the site is well maintained. It was also determined that an area of lead contaminated sludge disposal may represent a problem. Waste sludge containing lead was dredged from the slip basin and placed in the soil immediately northeast of the slip basin. This area was subsequently paved over for use as a parking area.

Lenox uses several monitor wells presently on site to sample the groundwater and analyse for approximately 30 parameters including lead contamination. One well is located directly in the area where the lead contaminated sludge is buried and analysis of groundwater taken from this well indicates lead contamination.

It was determined by the NJDEP participants at the meeting that a Remedial Investigation/Feasibility Study is warranted to further assess the groundwater contamination (possibly involving the installation of one or more additional groundwater monitoring wells) and the ability of the present arrangement (ie. asphalt pavement placed over area of sludge deposition) to preclude further migration of lead into the groundwater.

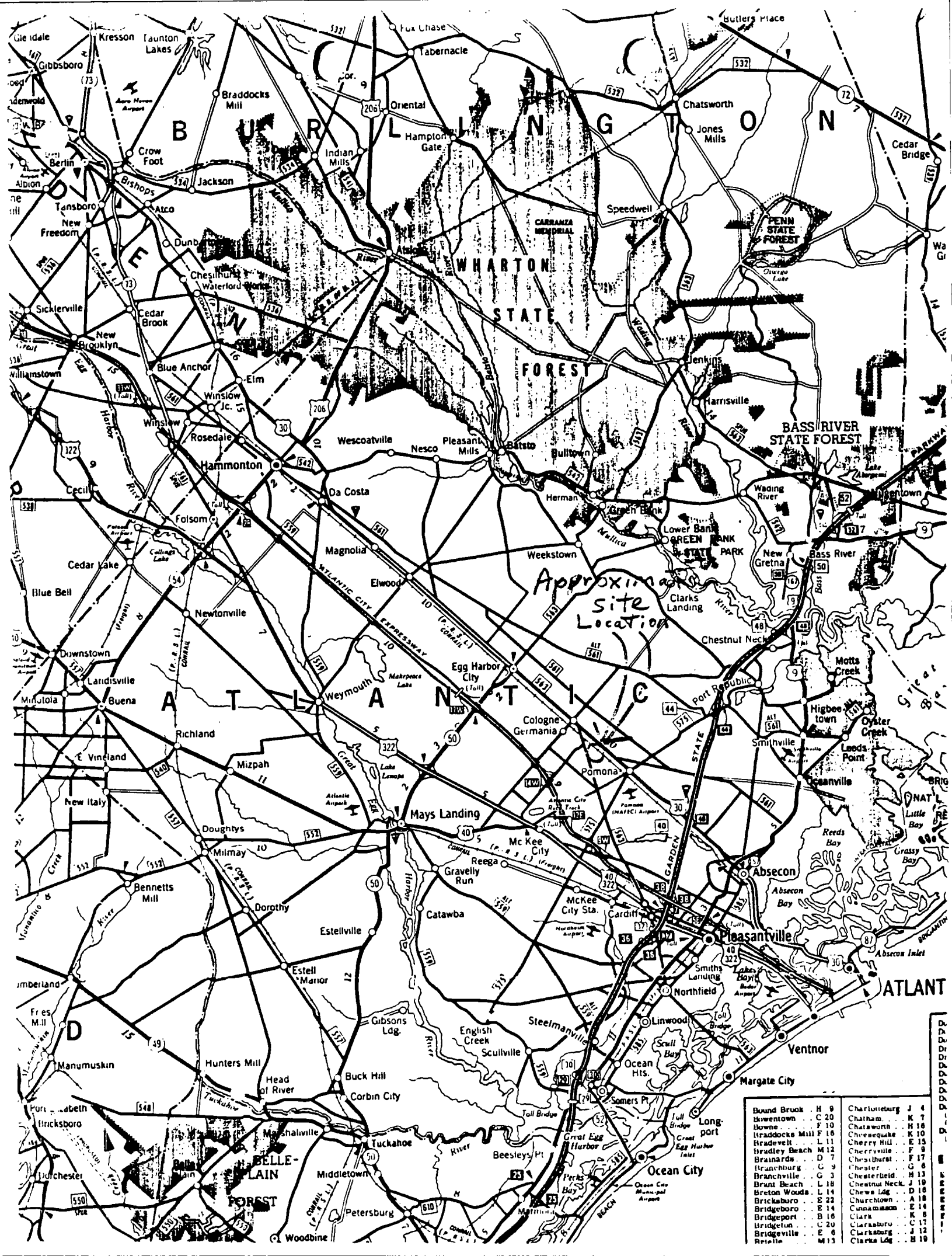
Signed:

HSMA (preparer) — (Date) 1/27/86

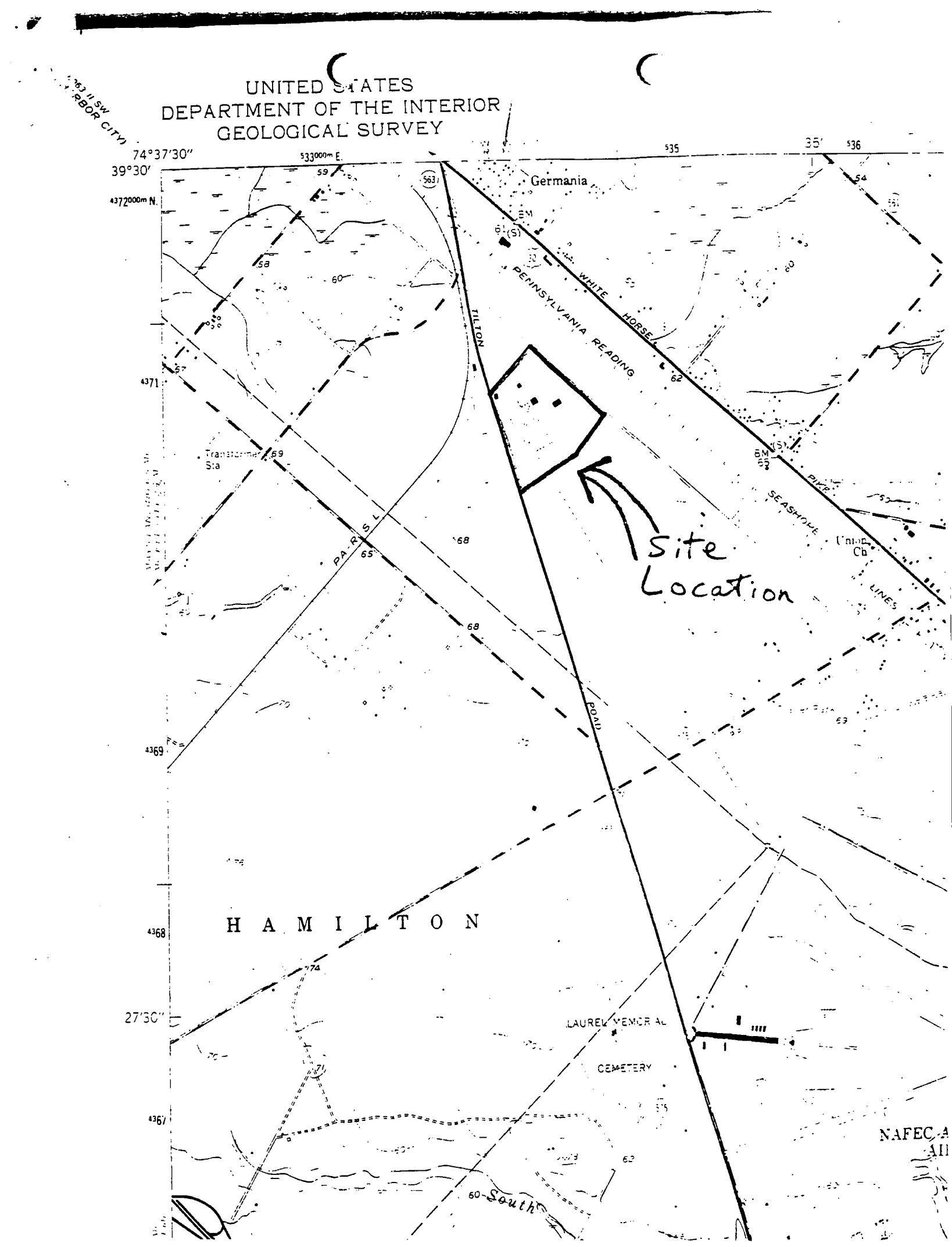
DWM-BHWE — (Date) 1/28/86

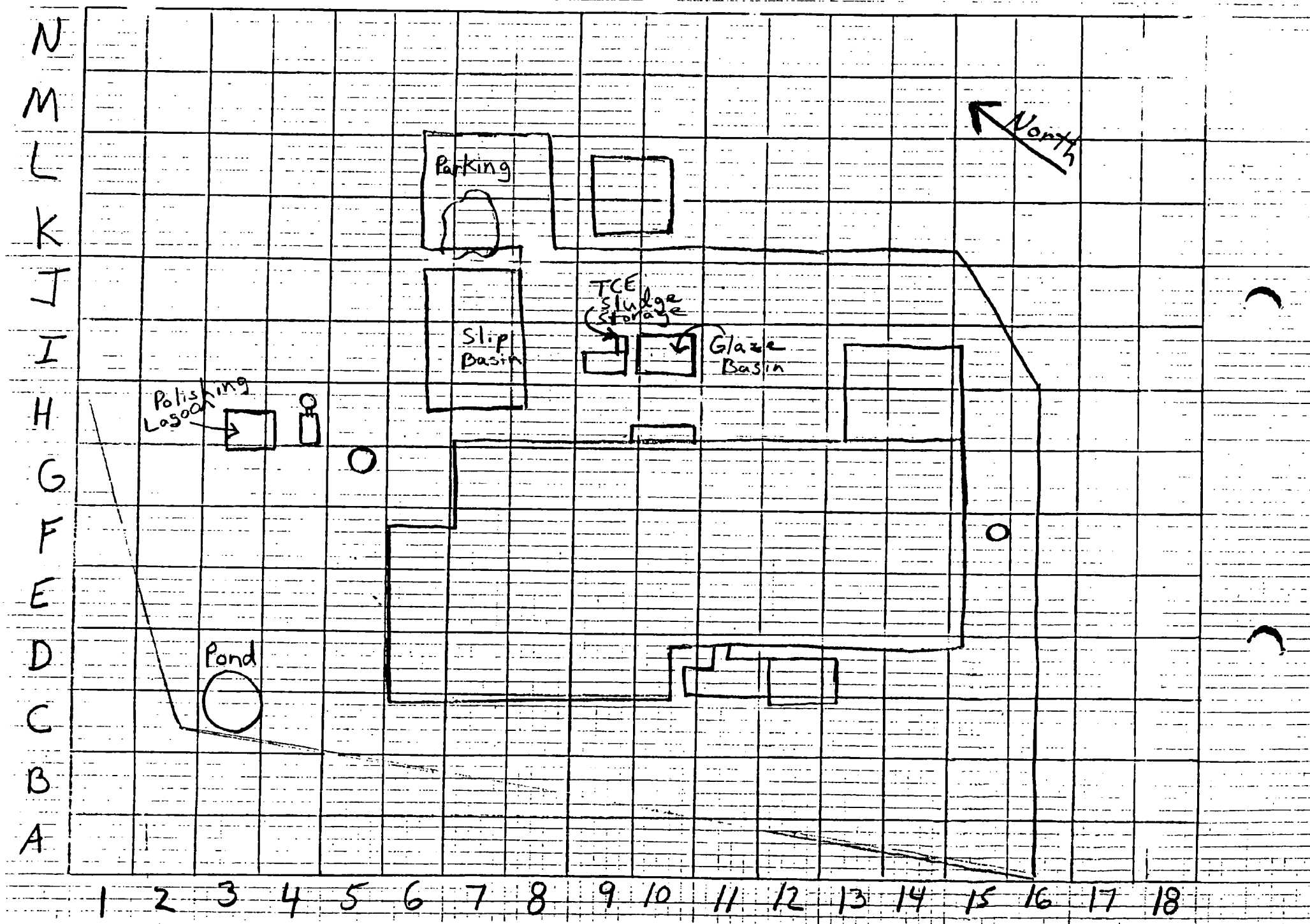
DWR — (Date) 1/31/86

DWM-BHWP and C — (Date) 1/27/86



Bound Brook	H 9	Charlottesburg	J 4
Brewertown	C 20	Chatham	K 7
Browne	F 10	Chatsworth	H 16
Braddocks Mill	F 16	Cheesequake	K 10
Bradevelt	L 11	Cherry Hill	E 15
Bradley Beach	M 12	Cherryville	F 9
Brainards	D 7	Chesilhurst	F 17
Branchburg	G 9	Chester	G 6
Branchville	G 3	Chesterfield	H 13
Brant Beach	L 18	Chestnut Neck	J 19
Breton Woods	L 14	Chews Ldg	D 16
Brickaboro	E 22	Churchtown	A 18
Bridgeboro	E 14	Cinnaminson	E 14
Bridgeport	B 16	Clark	K 8
Bridgeton	C 20	Clarksburg	C 17
Briggeville	E 6	Clarksburg	J 12
Brielle	M 13	Clarks Ldg	H 19


UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
74°37'30"
39°30'
533000m E.
4372000m N.
Germania
WHITE HORSE
PENNSYLVANIA READING
TILTON
PIKE
SEASHORE
LINES
PA-N J
ROAD
Site Location
HAMILTON
LAUREL MEMORIAL
CEMETERY
South
27'30"
4371
4369
4368
4367


N
M
L
K
J
I
H
G
F
E
D
C
B
A
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
North
Parking
Slip Basin
TCE Sludge Storage
Glaze Basin
Polishing Lagoon
Pond

SECTION 1

FACILITY DESCRIPTION

General Description of the Facility (40 CFR 122.25(a)(1))

Lenox China is a division of Lenox, Inc. Lenox China Inc. was merged into Lenox, Inc. effective December 31, 1983. Lenox, Inc. is an indirectly wholly-owned subsidiary of Brown-Foreman Distillers Corp. All references herein to Lenox China or Lenox shall mean the Lenox China Division, Lenox, Inc.

The Lenox China plant is located on Tilton Road, in Pomona, New Jersey (08240) on 56 acres of land, approximately 15 miles west of Atlantic City. The plant consists of nearly 410,000 square feet of manufacturing area, constituting the largest fine china manufacturing facility in the United States. Although primarily a manufacturing facility, an office force is also maintained to cover such areas as accounting, data processing, and customer service. In addition to the factory, a small retail outlet, open to the public, is operated on the premises.

The products manufactured at this facility are ceramic dinnerware and giftware of the highest quality. The dinnerware line includes fine china sold under the "Lenox" and "Oxford" brands, and quality casual dinnerware sold under the "Temperware by Lenox" brand. The giftware line includes functional and decorative china giftware such as vases, bowls, serving pieces, candy dishes, and special collections.

The factory is in operation 24 hours per day, seven days per week, on

Attachment A-1

a three shift basis. Of the three shifts, the day and evening shifts are involved in manufacturing five days per week. Functions on the midnight shift and weekends are reduced to kiln operations, light maintenance, clean-up operations, and security.

At present, Lenox China employs 1,400 men and women of whom 300 are salaried, or supervisory and support personnel. There are 1,100 production employees represented by the Glass, Pottery, Plastics, and Allied Workers International Union, Local 236-A.

Lenox China manufactures fine china by blending clay and other alumi-nio-silicates which are coated or glazed with lead glass after an initial firing. Process wastes containing leaded glaze have been stored on-site since the plant began operations in 1954. Results of tests on the waste materials indicate that they contain a hazardous waste (lead) as defined in the Resource Conservation and Recovery Act (RCRA) and NJPDES regulations.

The hazardous waste storage areas or facilities include a glaze basin and a slip basin, both of which are unlined and an area immediately adjoining the slip basin to the northeast where some waste dredged from the slip basin was spread and subsequently paved over.

These hazardous waste storage facilities are currently operated and maintained under USEPA Permit Number NJ0005177 and New Jersey DEP Permit Number NJD002325074.

A-2

Detailed Description of the Facility (40 CFR 122.25(a)(19))

The locations and boundaries of the hazardous waste storage areas, along with the locations of all principle buildings and structures, the plant production wells and the plant property lines are shown in relation to the surrounding area in Figure 1A (located in pocket). Land-use patterns for the areas immediately surrounding the plant are shown in Figure 1B.

There are no significant surface-water bodies within 1,000 feet of Lenox China property lines nor are there any sewer installations in this area at this time.

The topography of the site (Figure 1C) indicates that surface runoff associated with episodes of heavy rainfall is directed toward the northeastern end of the property where a retention berm has been placed to contain the runoff. The retention area, shown in Figure 1C, has a volume which is 20 times that required to contain runoff from the largest three-day rainfall occurring in the last 100 years (IMC Report, 10-9-79). Specific information for the retention area and a breakdown of paved/non-paved sections of plant site are appended.

The prevailing wind patterns for the area as recorded and compiled by the National Oceanic and Atmospeheric Administration (NOAA) at the agencies Atlantic City meteorological station are illustrated by the wind rose in Figure 1D. The application and interpretation of the wind rose is discussed in appended documents supplied by NOAA.

A 3

SE[illegible]

DESCRIPTION OF HAZARDOUS WASTES (40 CFR 122.25(a)(2))

Lenox China stores hazardous wastes in two unlined basins (glaze basin and slip basin) and in six 30-gallon drums which are kept in a diked and asphalted area behind the equipment shed at the rear of the main plant building. In addition, some sludge from the slip basin was spread over a limited area adjoining the basin and subsequently covered during an expansion of the asphalt parking lot.

A general description of the individual wastes in each storage area is provided below.

Glaze Basin (Lead Waste: Toxic EPA/Hazardous Waste No. D008)

The glaze basin has been used since 1954 to store process wastes consisting of clay, lead carbonate, frit (low solubility lead compounds in glass form) and silica. This material is not corrosive, ignitable or reactive.

Approximately 1,600 tons (1,200 cubic yards) of glaze having a high clay content and a total lead content of between 35 and 40 percent, as determined by Lenox China, was deposited in the basin prior to 1970. Permeability tests on the glaze waste indicated value of 2.69×10^{-6} cm/sec and 1.06×10^{-6} cm/sec in the vertical direction. Waste discharge to the basin was terminated in 1970 at which time Lenox China initiated action to recycle this material. To date, approximately 30 tons of waste glaze have been removed and recycled. Complete removal of all the residual glaze is the

A-4

ultimate objective. A further discussion of future waste management plans for the glaze and slip basins is provided in their respective closure plans (Section 12).

Slip Basin (Lead Waste: Toxic/EPA Hazardous Waste No. D008)

Waste materials discharged to the slip basin betwen 1954 and 1970 were limited to clay, nepheline syenite (feldspar) and flint. Discharge of process washwater containing glaze, which is a combination of clay, lead, carbonate, frit (low solubility lead compounds in glass form), and silica began in 1970 and continued until 1981 when it was discontinued. Lenox China has determined that material currently in the slip basin is not reactive, corrosive or ignitable. Moreover, this material has a high clay content and a total lead content of less than 2 percent. Failing head and triaxial permeameter tests indicate that the vertical permeability of the sludge in the basin ranges between 7.06×10^{-6} cm/sec and 3.23×10^{-7} cm/sec.

In addition, some waste sludge dredged from the slip basin during the early 1970's was spread over a limited area immediately to the northeast of this basin. The lead content and leachability of this sludge was evaluated through a soil boring, sample collection and testing (EP toxicity) program. As a result of this work it was determined that a portion of the material placed in this area is of a hazardous nature. A more comprehensive discussion of this material is presented at the end of Section 12.

A-5

Drummed Wastes (Trichloroethylene Degreaser Sludge: Toxic/EPA Hazardous Waste No. F001)

Waste trichloroethylene (TCE) captured in degreaser traps after its use in selected stages of the process operation is stored in six 30-gallon drums at a secured onsite location behind the equipment storage shed in the parking lot at the rear of the main plant building. Each drum is clearly labeled to inform workers handling these wastes of the associated hazards. Under normal production conditions these drums are filled, sealed, and removed by a state approved hazardous waste hauler to an approved treatment facility (incineration) every three months. The sludge in these drums is not corrosive, reactive or ignitable.

Concentration information for the hazardous lead wastes handled/stored by Lenox in the slip basin is appended to the end of this section.

A-6

TOXICITY (EP) OF UNTREATED WASTE

FROM THE SLIP BASIN

Sample Date	Source	EPA Toxicity
10- 7-80	Treatment Plant	43 ppm leachable Pb before treatment
10- 8-80	do	40 ppm leachable Pb before treatment
11- 6-80	do	69 ppm leachable Pb before treatment
11-21-80	do	102 ppm leachable Pb before treatment
12- 3-80	do	27 ppm leachable Pb before treatment
12- 9-80	do	25 ppm leachable Pb before treatment
12-10-80	do	29 ppm leachable Pb before treatment
12-23-80	do	25 ppm leachable Pb before treatment
1- 8-81	do	25 ppm leachable Pb before treatment
1-19-81	do	35 ppm leachable Pb before treatment
3-11-81	do	20 ppm leachable Pb before treatment
6- 5-82	do	14 ppm leachable Pb before treatment
4-23-82	do	36 ppm leachable Pb before treatment
8- 9-82	Equilization Sump	9 ppm leachable Pb before treatment Total lead was 0.53% Pb on this sample
3-11-83	Treatment Plant	8.9 ppm leachable Pb before treatment
2- 6-84	do	49.05 ppm leachable Pb before treatment

SECTION 3

WASTE ANALYSIS PLAN (40 CFR 122.25(a)(3))

Lenox China stores several Appendix VIII wastes at its Pomona, New Jersey, plant. Lenox has reviewed information characterizing its current and historical waste mix and has identified the following 40 CFR 264.93(a) hazardous constituents:

- Lead and compounds (hazardous waste components of process sludge)
- Trichloroethylene (hazardous waste component of degreaser sludge)

This list characterizes the entire waste stream including production and maintenance-related wastes, off-specification materials, intermediate products, and out of date materials that are handled as wastes.

All monitoring done as part of the Lenox RCRA compliance program includes test for the constituents identified above.

Scope of Plan

- Test categories
- Frequency of tests
- Test parameters
- Process changes
- Incidental process wastes
- Trichloroethylene (TCE) testing

Waste Analysis Procedure

1. The following categories are tested in accord with this plan:

a) Alumino-silicate sludges containing lead. These are monitored by the Director of Ceramic Research and Development. Any process change in the production clays and glazes is initiated by the Director of Ceramic

Research and Development. He will then test waste sludges for any substance found in Table 1, 40 CFR 261.24 consequential to the process change.

b) TCE sludge produced in process degreasing operations. These are monitored by the Facilities Project Engineer. This waste is a specific EPA waste and is periodically tested by Lenox to determine the percentage of TCE present in the sludge. A copy of a recent analysis on the TCE sludge is appended. Moreover additional analyses may also be performed at the facility receiving this drummed waste.

Note: Trichloroethylene is purchased in drums. It is collected from degreaser traps and stored onsite in sealed, marked drums. When quantities total 30 gallons the drum is sealed, and sent to Rollins Environmental Services, an approved treatment (incineration) facility. TCE does not appear in any other part of the waste or process stream.

c) All substances entering the facility. A large variety of substances entering the facility are routinely reviewed by the Facilities Project Engineer in accordance with procedures established by Lenox and appended to the end of this section. The Facilities Project Engineer tests all resulting process waste to determine toxicity.

2. The Senior Engineering Technician provides the designated R&D Lab Technician with a sample of untreated waste obtained from the equilization sump at least once each quarter. Samples are collected in accordance with waste sampling and analysis procedures described in 40 CFR 261 Appendix 1, 2, and 3 which are incorporated in this plan by reference.

3. The R&D Lab Technician tests the sample for EPA toxicity following the procedures for the chemical analysis of water and wastes provided in EPA-600 4-79-020 which are incorporated in this plan by reference. This is done to ensure that proper treatment can be maintained and so that the effect of process changes, if any, can be noted.

a) The R&D Lab Technician records all pertinent toxicity data in a log entitled "EP Toxicity of Untreated Waste" (a copy of which is appended to the preceeding section).

CENTURY
Environmental Testing Labs, Inc.
P.O. Box 248/1501 Grandview Avenue/MidAtlantic Park/Thorofare, N.J. 08086/609-648-3939

ANALYSIS REPORT
NO. FF4344
INV.#3615/mp

CERTIFICATE OF ANALYSIS

CLIENT

Lenox China
Pomona, N.J. 08240
ATTN: William Simmons

LOG NUMBER	SAMPLE IDENTIFICATION
FF4344	Sludge Sample

SAMPLE RECEIVED _____ ANALYSIS COMPLETED 1/10/84

COLLECTED BY _____

RESULTS (mg/L unless specified)

TEST PARAMETER				TEST PARAMETER	MG/KG FF4344		
BOD_5*				Chlorine Demand			
COD				Chlorine Residual			
TOC				Chloride (CL)			
ssolved Oxygen				Silica			
uspended Solids				Petroleum HYC.			
Total Solids				Hardness (as $CaCO_3$)			
Dissolved Solids				TCE	19,000	(1.9%)	
Sett. Solids (ml/L)							
pH							
Phenols				Aluminum			
Cyanide (Total)				Antimony			
Fluoride				Arsenic			
Cyanide (Free)				Barium			
Surfactants (mg/L LAS)				Boron			
Oil & Grease (Freon)				Cadmium			
				Calcium (Ca)			
Nitrogen (KJD as N)				Chromium (Total)			
Nitrogen (Ammonia as N)				Chromium (Hexa)			
Nitrogen (Organic as N)				Copper			
Nitrite (N)				Iron			
Nitrate (N)				Lead			
Phosphate (P) Total				Magnesium (Mg)			
Phosphate (P) - Ortho				Manganese			
Sulfate (SO_4)				Mercury			
Sulfite (SO_3)				Nickel			
Sulfide				Potassium			
Color				Selenium			
Turbidity (NTU)				Silver			
Conductivity (Micromohs)				Sodium			
Alk (Total) as $CaCO_3$				Tin			
				Titanium			
ecal Coliform				Zinc			
tal Coliform							

* A minimum of 5 sample dilutions were used for this determination.
** Non-detectable, below the limit of detection.

LAB COMMENT:

A-10

LAB CERTIFICATION NO: 08153

Richard W. Lynch

SECTION 4

WASTE MANAGEMENT AREA (40 CFR 122.25(9)(19): 264.95 and 264.97)

Physical Layout

The property boundaries of the Lenox China, Pomona plant, along with the locations and boundaries of the waste management area (which includes a storage area for drummed trichloroethylene sludge, a glaze basin, slip basin and an adjoining area where some dredge wastes were spread), the configuration of the envelope immediately surrounding the combined storage facilities (i.e. the compliance point) and the locations of all RCRA monitoring wells on the plant site are provided in Figure 4A.

The extent of the hazardous waste material dredged from and placed adjacent to the slip basin during the early 1970's, and only detected after the initial set of four RCRA monitoring wells had already been installed, was determined from a subsequent soil boring investigation performed in February 1983. The investigation involved the collection of soil samples for EP toxicity testing. The distribution of the analytically determined leachable lead values provided in Figure 4B serves as the basis for defining the northeastern limit of the hazardous waste management area.

Monitoring Well Construction Information

Between September 23 and 29, 1982, Monitoring Wells 1, 2 and 3 were drilled at locations believed to be upgradient (MW1) and immediately downgradient (MW2 and MW3) of the combined waste facilities (Figure 4A). Water-level information collected from the monitoring wells and an existing

Where is MW 22?

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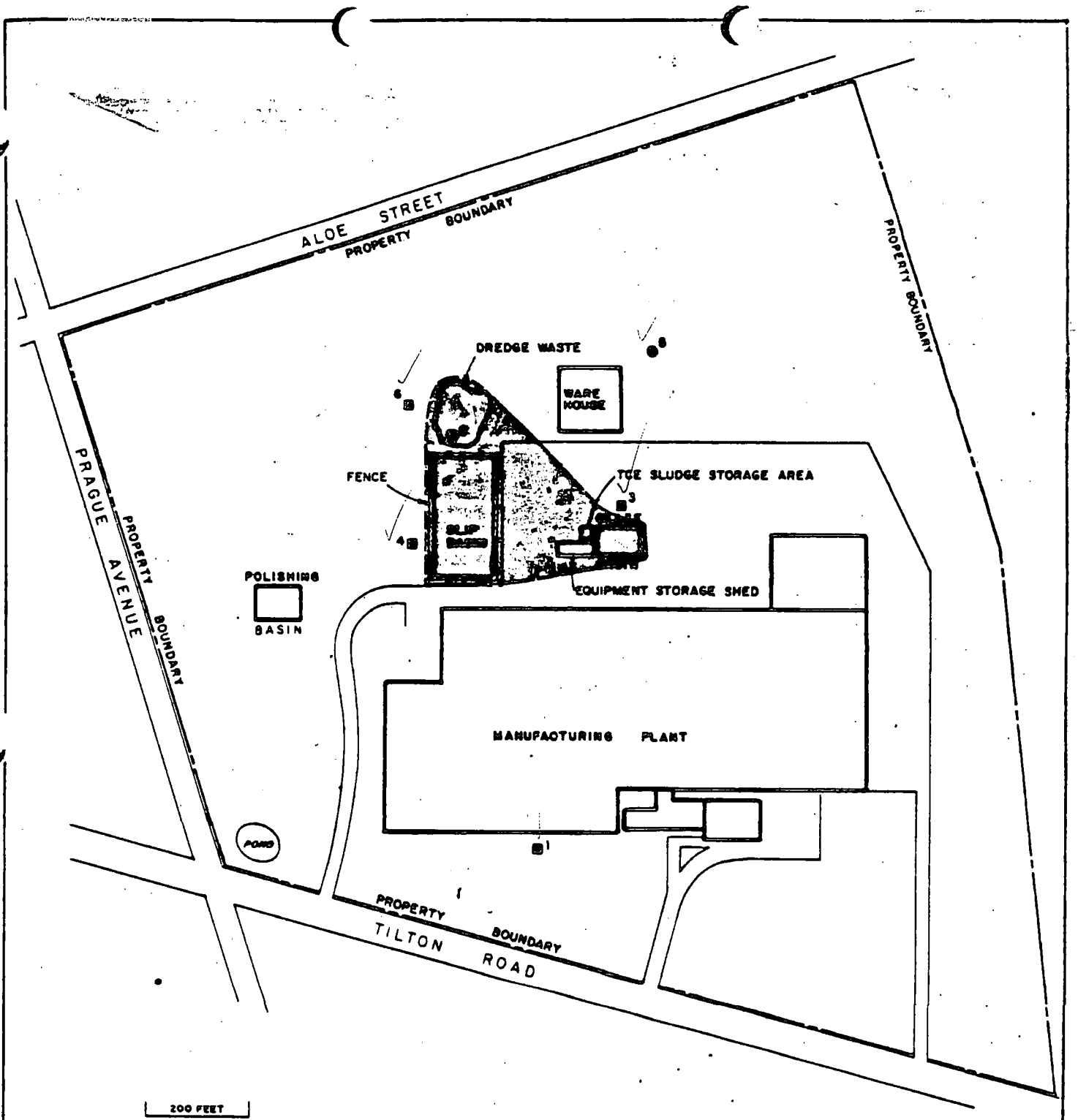


EXPLANATION

- WASTE STORAGE FACILITY (COMBINED)
- ■ RCRA MONITORING WELL (COMPLIANCE POINT)
- ⊙ EXISTING SMALL DIAMETER PIEZOMETER

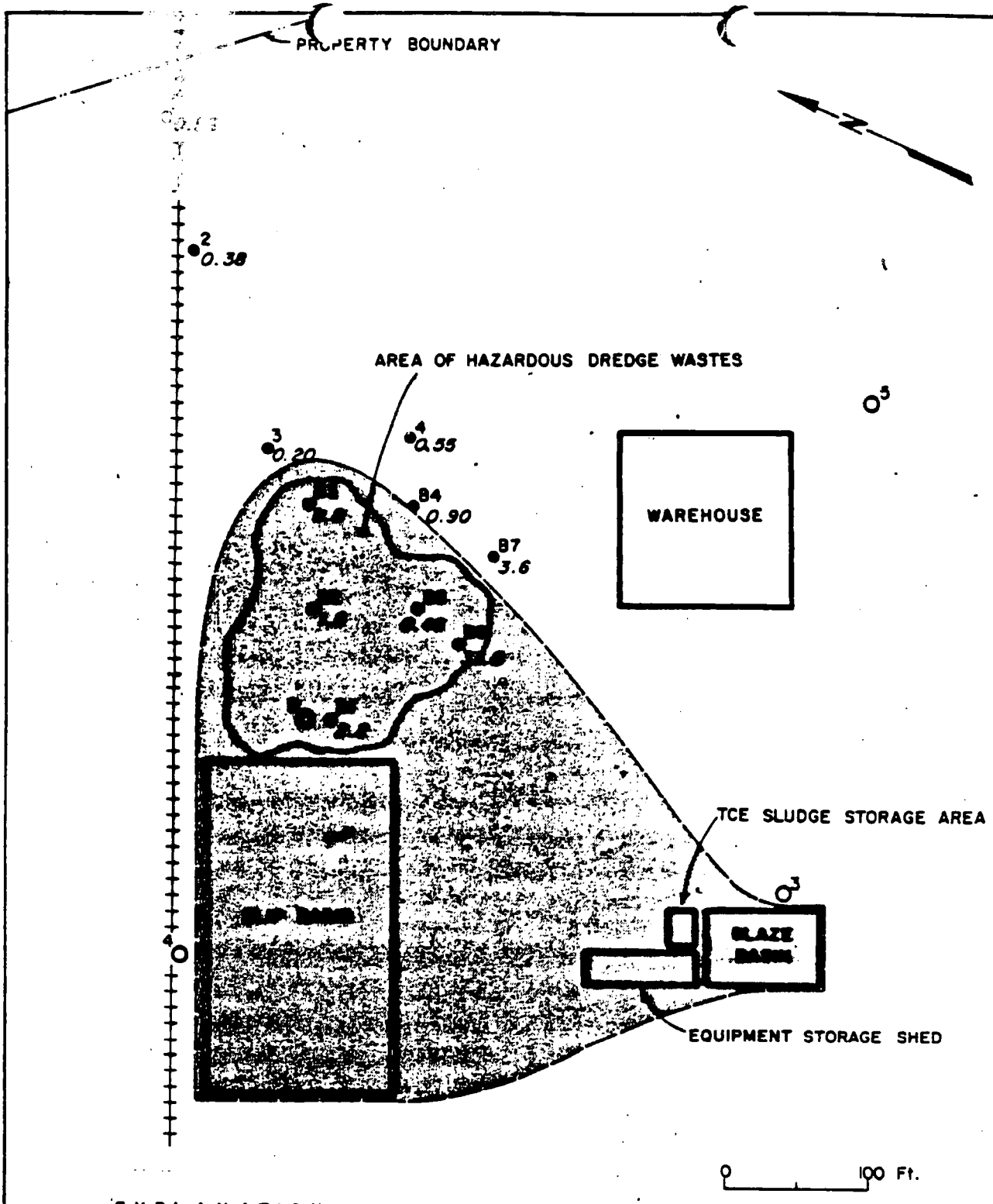
SUBJECT

LOCATIONS OF WASTE STORAGE AREAS AND RCRA MONITORING WELLS

PREPARED FOR

LENOX CHINA
POMONA, NEW JERSEY

Geraghty & Miller, Inc.	COMPILED BY E. WERTH	SCALE SHOWN	FIGURE 4A
	PREPARED BY R. PADULA	DATE JAN. 84	
	PROJECT MGR E. WERTH		



EXPLANATION

O⁴ MONITORING WELL

B1— SOIL BORING LOCATION

2.2— LEACHABLE LEAD CONCENTRATION BASED ON A COMPOSITE SOIL SAMPLE (IN ppm)

HAZARDOUS WASTE STORAGE FACILITY

SUBJECT

LOCATIONS OF SOIL BORINGS AND CONCENTRATIONS OF LEACHABLE LEAD IN THE SOIL

PREPARED FOR

LENOX CHINA
Pomona, New Jersey

Geraghty & Miller, Inc.	COMPILED BY E. Werth	SCALE Shown	FIGURE 4B
	PREPARED BY G. Schaffner	DATE 1-84	
	PROJECT MGR E. Werth		

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water-table piezometer (No. 5) over the period October 5 to 26, 1982, was used to locate an additional monitoring well (MW4) which was installed on November 22, 1982.

The four monitoring wells were installed under the direction of Geraghty & Miller, Inc. by the A.C. Schultes Well Drilling Company (Woodbury, New Jersey), a New Jersey-licensed driller. Each well was drilled to an approximate depth of 32 feet below land surface with the screened portion of each well straddling the water table. Depth to the water table at the time of drilling averaged about 12 feet below land surface, with the screens generally starting at about 8 feet below land surface. The wells were drilled using hollow stem auger equipment (6-inch inside diameter) and were constructed of PVC casing and 20 slot screen. Sections of screen and casing were pressure fitted together and secured with stainless steel sheet metal screws to avoid the use of PVC solvents and glues. The annular space opposite the screen was packed with Jessie Morie No. 1 gravel and capped with a bentonite seal to prevent the direct infiltration of surface water into the gravel pack. The annular space above the bentonite seal was filled with a cement grout to support the upper portion of the well and to anchor a 6-inch diameter protective steel casing set over the PVC casing.

Soil samples from the auger flytes were examined on a continuous basis and split spoon samples were collected every 5 feet or at perceived changes in the lithology of the substrate. All wells were logged and a copy of the log for each is appended. Undisturbed (Shelby tube) soil samples were collected from Monitoring Wells 1, 2, and 3 and from the bottoms of the slit

and glaze basins to determine vertical and horizontal permeabilities for the soils and waste material. The results of the falling head and triaxial permeameter analyses on the soil/waste material are also appended along with calaculations made by Clarence Welti Associates soils laboratory.

An additional RCRA monitoring well (No. 6) was drilled and installed on December 8, 1983 to replace Monitoring Well 2, when it was determined that the latter well tapped an area where dredge waste from the slip basin had been spread. The new replacement well was constructed in the same fashion as the previously installed wells.

Detailed information on the construction of all the RCRA monitoring wells is provided in Figures 4C through 4G.

SECTION 8

PREVENTIVE PROCEDURES (40 CFR 122.25(a)(4-6)(8-9)

Lenox China has developed and implemented procedures designed to identify and control potentially hazardous materials before they enter the manufacturing plant, during their process use and as waste material. These procedures stress that potentially hazardous materials will not be introduced to any process where a reasonable substitute is available.

Scope of Procedures

- Handling hazards
- Flood and runoff related problems
- Water supply contamination
- Personnel exposure

Preventive Procedures

1. Handling Hazards:

Lenox China is not involved with the unloading of hazardous wastes. However, materials which are potentially hazardous, or may become hazardous wastes, are used in and generated by process operations. Specifically these materials are lead and trichloroethylene both of which are controlled at their point of entry in accordance with the following procedures:

a) Control of Lead Substances:

Procedures for the receiving, storage, processing, spill control and disposal of lead bearing substances (excluding leaded glaze waste stored in the glaze basin and recycled at off-site locations) have been established in accord with guidelines published in the Federal Register, Volume 45, No. 98. These are:

c) Under no circumstances are these drums be saved or used for other materials or purposes.

5. The Hazardous Waste Manifest

a) The Maintenance Secretary is to set aside a sequentially numbered Hazardous Waste Manifest (blank NJDEP form appended) and notify the Senior Plant Engineering Technician.

b) The Maintenance Secretary is to be notified one week in advance of any planned waste TCE removal action (offsite shipment) by the Senior Plant Engineering Technician in order to complete the following record keeping actions:

1) The Maintenance Secretary is to prepare the Hazardous Waste Manifest in accordance with previously identified State instructions.

2) The Senior Plant Engineering Technician is to coordinate the proper handling of Hazardous Waste Manifest papers with the Receiving Manager and the Hazardous Waste Transporter.

3) The Senior Plant Engineering Technician is to return the signed yellow "Generator's Copy" of the Hazardous Waste Manifest to the Maintenance Secretary for retention in the files.

4) The Maintenance Secretary is to follow up on the Manifest to make sure that the pink "Disposer's Copy" of the Manifest is received from the designated disposer within 35 days of return. If "Disposer's Copy" is not received, the Maintenance Secretary will initiate tracing procedures as required in 40 CFR 262.41 (incorporated by reference).

5) Copies of the Hazardous Waste Manifest are to be retained in the Maintenance files for three years.

6. Collection and Disposition of TCE Sludge

a) The Senior Plant Engineering Technician is to maintain an adequate inventory of 30 gallon plastic drums for TCE collection and 30 gallon fiber drums for spill clean up.

b) The Senior Plant Engineering Technician is to insure that TCE sludge is collected in 30 gallon plastic drums by appropriate Maintenance personnel and in accordance with Degreaser Sludge Draw-off Practices (as specified in the appended procedures).

c) The Maintenance Forklift Operator is to transport full sludge drums from the collection station to the sludge drum storage area behind the equipment storage shed. He is to be certain that all drum closures are secure before moving any drums.

d) The Senior Plant Engineering Technician is to prepare a Hazardous Waste Label with date and Manifest number and affix it to the drum. A blank copy of the label is appended for reference. He is to also number the drums sequentially and label "Trichloroethylene Sludge RQ 1000 ORM A UN1710 L6861" by painting this identifier on the body of the drum.

e) The Senior Plant Engineering Technician is to direct that full sludge drums be weighed with a record of these weights kept on file at the plant. These weights are to be forwarded to the Maintenance Secretary for use on the Hazardous Waste Manifest.

f) The Senior Plant Engineering Technician is to arrange to have sludge transported to a licensed hazardous waste disposal incineration facility by means of a hazardous waste hauler.

c) Control of Miscellaneous Solvents, Cleaning Agents, etc.

A description of control procedures for these miscellaneous materials is appended.

2. Flooding and Runoff

Flooding and runoff do not pose a significant threat in terms of the accidental release of hazardous materials at the Lenox China plant. Flooding has never occurred in the hazardous waste storage areas nor is it likely to as demonstrated by the information provided in Section 1 (Facility Location Information) of this application. Moreover, runoff is prevented from entering two (slip and glaze basin) of the three hazardous waste storage areas by the berms, dikes, and curbing that surround these facilities.

The remaining area, used to store trichloroethylene degreaser sludge,

is paved with an impermeable material which extends more than 300 feet from the storage area in all directions. The storage of trichloroethylene sludge in this area is accomplished using small (30 gallon) weatherproof (polypropolyene) drums that are easily maintained and inspected. The drums are kept sealed, except during filling operations. This together with frequent inspections and immediate spill recovery/cleanup actions, as necessary, serve to eliminate the accidental escape and migration of hazardous materials during intervals of precipitation.

3. Water Supply Contamination

The possibility of ground-water contamination is greatly minimized by the nature of the primary waste constituent, lead, which is readily adsorbed onto soil particles and is not mobile in ground water.

In addition, there are no discharges of hazardous materials onto the ground surface and containers of hazardous material are stored in paved areas. As a result there is no active accumulation of hazardous wastes on the site except for the registered facilities.

In order to verify that the quality of water provided by the two deep onsite production wells is suitable for potable use, Lenox:

1. Samples each production well for lead and barium semi-annually.
2. Samples each production well for nitrate, calcium, and fluoride annually.
3. Samples water from the infirmary water tap for coliform bacteria on a quarterly basis.

These data are supplemented by and evaluated with the water quality information obtained from the shallow RCRA monitoring wells.

In the unlikely event that contaminants are detected and verified in the plant water supply, immediate action is to be taken to provide an alternate drinking supply (e.g. bottled water) while the proper and appropriate remedial action(s) are implemented.

4. Personnel Exposure

Exposure to the Hazardous Wastes generated at this location does not pose a threat to personnel. Moreover any remote threat is precluded by the protective clothing and respiratory protection required for normal operations or emergency response as specified in Section 7 and required under OSHA regulations.

SECTION 9

WASTE REACTION PRECAUTIONS (40 CFR 264.17)

Lenox China does not store reactive or ignitable wastes in any of the hazardous waste storage areas at the company's Pomona, New Jersey, plant. Moreover, although the different hazardous waste materials are segregated during handling and storage, they are not incompatible and if mixed would not react in a fashion deleterious to personnel health and safety and/or to the quality of the environment.

As the hazardous waste materials handled and stored by Lenox are not ignitable, reactive or incompatible, the 40 CFR 264.17 prevention standards are not applicable.

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SECTION 10

ONSITE TRANSPORT OF HAZARDOUS WASTES (40 CFR 122.25(a)(10))

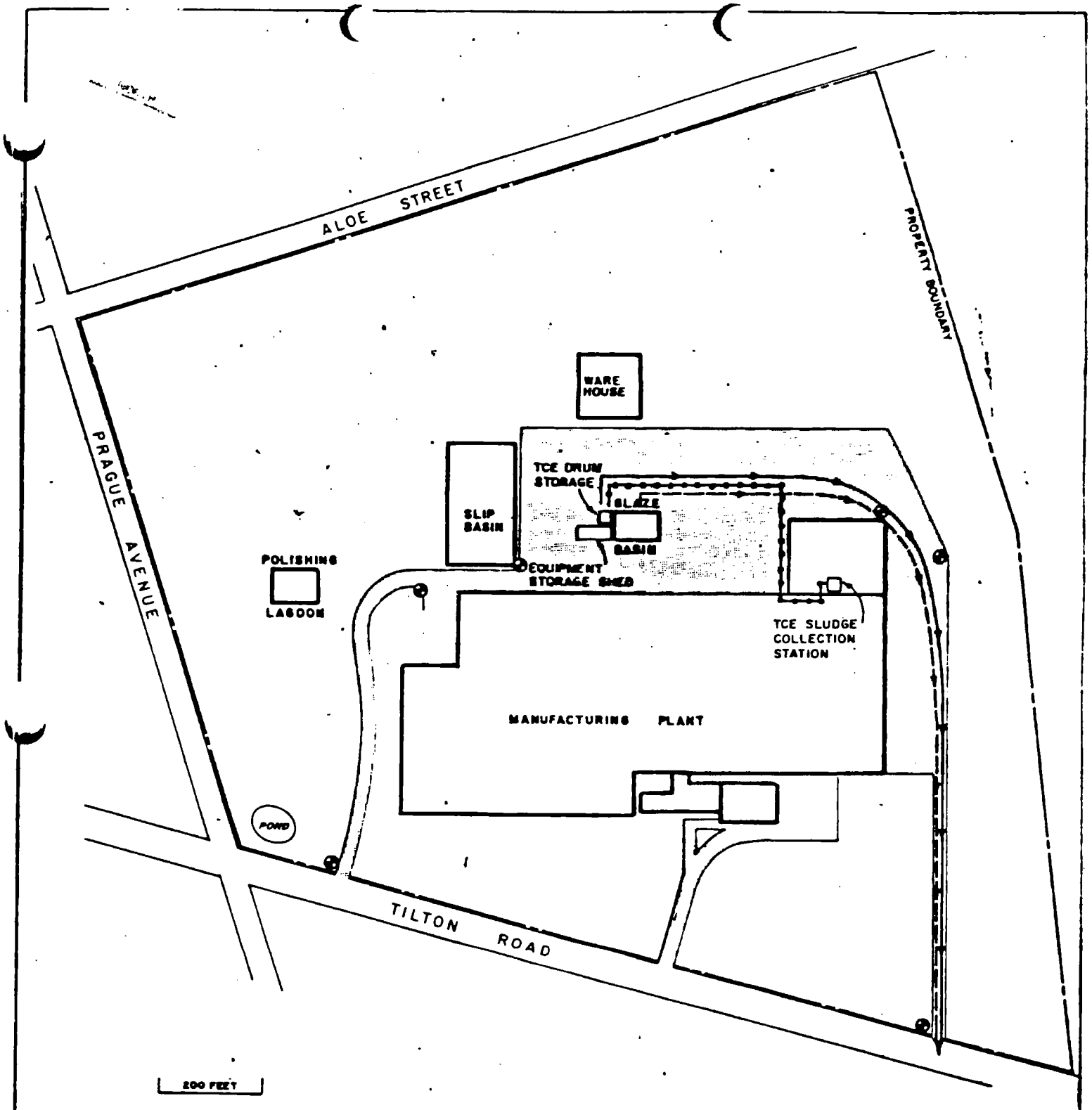
Lenox China's Pomona, New Jersey, plant does not receive any hazardous wastes from offsite locations and onsite vehicular traffic in connection with hazardous wastes is limited to the movement of small quantities of trichloroethylene (TCE) degreaser sludge (less than 75 gallons per occasion) and leaded glaze waste.

Approximately 5 to 10 gallons of TCE sludge is routinely collected from the degreaser sump and manually transferred to the storage area at the rear of the equipment storage shed along the route shown in Figure 10A. The stored TCE sludge is removed from the site by a state approved hazardous waste hauler as soon as 180 gallons (six 30 gallon polypropolyene drums) are accumulated. TCE is removed from the site in this fashion approximately once every three months.

Lenox China also handles leaded glaze and slip waste. Glaze wastes were placed in the glaze basin between 1954 and 1970. Twenty-eight tons of this material was removed and recycled between 1980 and 1981. During such operations the area around the glaze basin is cordoned off from all traffic in order to facilitate and ensure safe truck loading operations which require heavy equipment. Approximately 20 tons of glaze is loaded into and removed by each truck resulting in a total truck weight of approximately 70,000 pounds. This load can be sustained by the asphalt roadway leading to and surrounding the glaze basin as bituminous concrete pavements have a typical bearing capacity of 50,000 pounds/axle.

A number of traffic control signs (stop/slow signs) exist at the facility. These are supplemented by roadway arrows and lanes which direct and separate traffic. The locations of existing stop signs are shown on Figure 10A.

Slip waste, which contained lead betwen 1970 and 1981, was discharged into the slip basin through the buried effluent transfer pipe system shown in Figure 10B. The slip basin acts as a primary clarifier treating the waste stream by sedimentation. Sludge accumulating in the basin is periodically pumped to the industrial waste treatment plant where it is dewatered and treated for the purpose of rendering it non-hazardous. Transfer of the potentially hazardous sludge from the slip basin to the industrial waste treatment plant is also accomplished through piping. Treated sludge is removed from the facility by truck. However after passing through the onsite waste treatment plant the sludge is no longer hazardous because it has a leachable lead content of less than 5.0 ppm.



EXPLANATION

- ROUTE FROM SOURCE TO STORAGE (TRANSFER PERFORMED BY PLANT PERSONNEL)
- ROUTE USED TO REMOVE TCE SLUDGE FROM SITE (REMOVAL PERFORMED BY WASTE HAULER)
- ROUTE USED TO REMOVE LEAD GLAZE (FROM GLAZE BASIN)
- PAVED ROADWAY
- TRAFFIC CONTROL SIGN

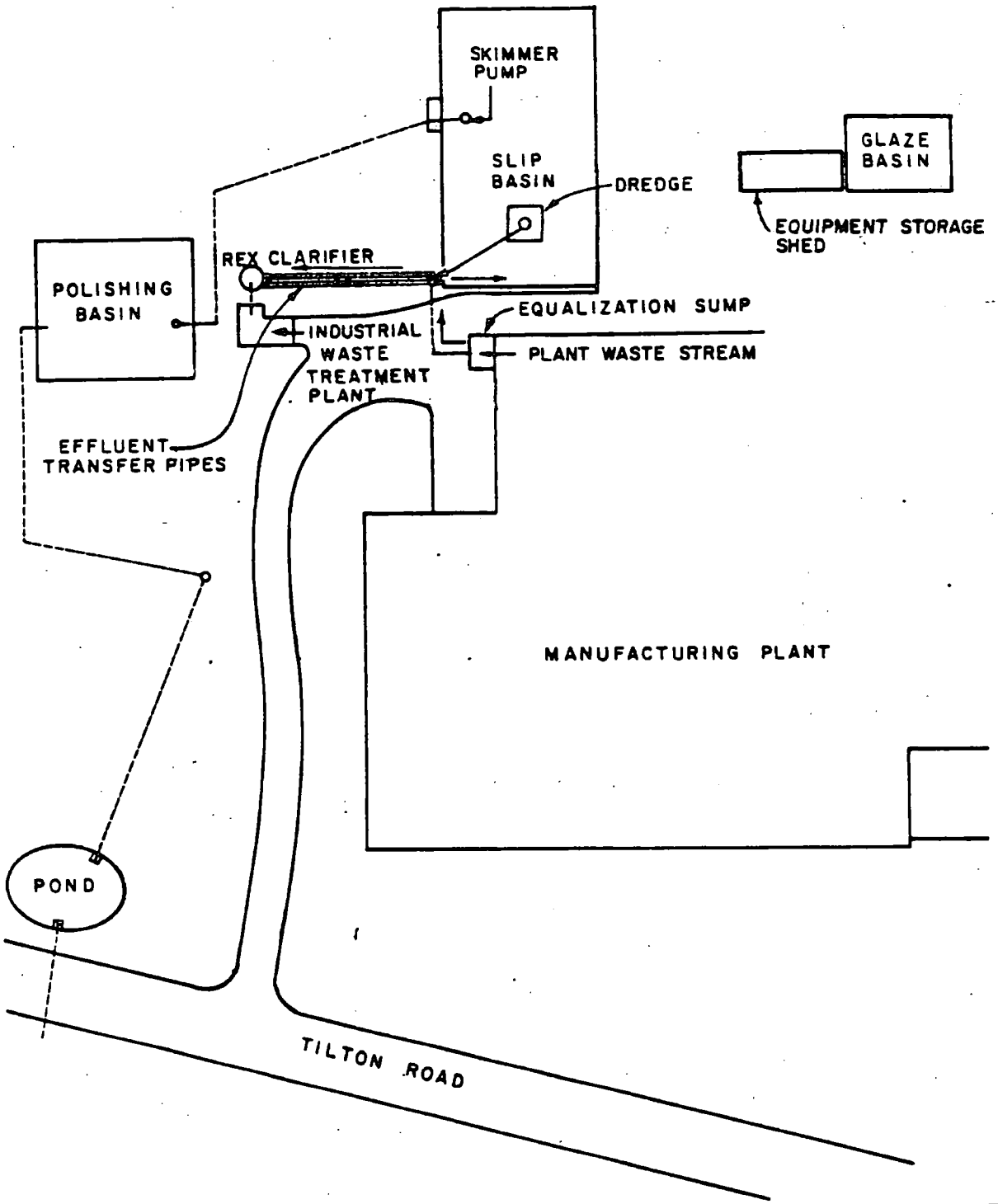
SUBJECT

TCE SLUDGE AND LEADED GLAZE ROUTING DIAGRAM

PREPARED FOR

LENOX CHINA
Pomona, New Jersey

Geraghty & Miller, Inc.	COMPILED BY: E. WERTH	SCALE: SHOWN	FIGURE 10A
	PREPARED BY: G. SCHAFFNER		
	PROJECT MGR: E. WERTH	DATE: JAN. 84	



SUBJECT

SLIP WASTE ROUTING DIAGRAM

PREPARED FOR

LENOX CHINA
POMONA, NEW JERSEY

Geraghty & Miller, Inc.	COMPILED BY Erhardt Werth	SCALE Shown	FIGURE 10B
	PREPARED BY Eleanor Wilson	DATE Jan. 1984	
	PROJECT MGR Erhardt Werth		

SECTION 12

CLOSURE AND POST-CLOSURE INFORMATION (40 CFR 264.112 and 264.118)

SLIP BASIN

Lenox China manufactures fine china by blending clay and other aluminosilicates which are coated or glazed with lead glass after an initial kiln firing. Process wastes containing lead were discharged to the Slip Basin (facility) between 1970 and 1981. As this facility (Slip Basin - RCRA Facility No. NJD002325074) is an integral part of Lenox China manufacturing process, closure is not anticipated prior to termination of manufacturing at the Pomona, New Jersey, plant. At that time Lenox China will close the facility in accord with the following plan which complies with 40 CFR 265.111 and eliminates the post closure escape of hazardous constituents to the environment.

Facility Description

The Lenox China Slip Basin, which is a component of the on site industrial waste treatment system, has received process wastes since the beginning of plant operations in 1954. Waste materials placed in the slip basin between 1954 and 1970 were limited to clay, nepheline syenite (feldspar) and flint. The discharge of process washwater containing glaze which is a combination of clay, lead, carbonate, frit (low solubility lead compounds in glass form) and silica to the facility began in 1970 and continued until 1981. Starting in 1981 a reclamation system designed to recycle glaze wash internally was installed to eliminate any further discharge of lead bearing

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materials to the facility. The maximum volume of waste in the facility is approximately 1,200,000 gallons. Material currently in the slip basin has a high clay content and a total lead content of less than 2 percent.

The facility is located approximately 50 feet from the northern corner of the main plant (manufacturing) building. The basin is rectangular in shape and measures approximately 100 feet by 200 feet. It extends to a depth of approximately 7 feet below land surface and is surrounded by a berm or dike having an average height of 3 to 4 feet. The dikes show no evidence of leakage. erosion and/or slumping.

The base of the facility rests in unconsolidated deposits composed primarily of fine to medium grained sand with some clay. Thickness of the unsaturated zone between the bottom of the facility and the water table ranges from 10 feet to 13 feet depending upon seasonal variations in precipitation and evapotranspiration.

Although the bottom of the facility is unlined the high clay content of the waste material effectively reduces the infiltration of any contaminants to the ground-water system. Falling head and triaxial permeameter tests performed in November 1982 on samples of the clay waste from the facility indicate that the vertical permeabilities of this material range from 6×10^{-6} cm/sec to 3×10^{-7} cm/sec.

The slip basin serves as the primary clarifier for Lenox China's industrial waste plant system treating the waste stream by sedimentation. Sludge accumulating in the facility is routinely removed (using a sludge

suction pump) and sent to a vacuum filter where it is dewatered and treated with diammonium phosphate to render it non toxic (i.e. reduce leachable lead concentrations to well below toxic levels). The resultant non-hazardous sludge is disposed of at a local landfill.

Prior to closure (termination of manufacturing operations) Lenox China will remove all lead bearing waste material from the facility.

RCRA Subpart G Closure Plan (40 CFR 265.111)

Once the waste sludge has been removed from the facility and treated, Lenox China will close the facility by removing all residual soil contamination occurring in the floor and walls of the slip basin. Soil(s) will be determined to be contaminated if they are found to leach lead at concentrations greater than 5 ppm using EP Toxicity testing procedures. In order to delineate the extent of any residual contamination requiring removal, soil samples will be collected at depth increments of 6 inches at numerous locations in the floor and walls of the basin and analyzed for their leachable lead content by a chemical laboratory certified by USEPA and the State of New Jersey.

Contaminated soil removed from the facility will be dewatered and treated on site to convert any soluble lead carbonate in the soil to insoluble lead phosphate. This treatment has been demonstrated to reduce lead concentrations in the leachate to less than 0.3 ppm. After treatment the non-hazardous soil will be disposed of at a local permitted landfill (Woodbine Landfill, Fiddler Hill Road, Woodbine, New Jersey) located approximately 20 miles from the site.

CLOSURE AND POST-CLOSURE INFORMATION (40 CFR 264.112 and 264.118)

GLAZE BASIN

Lenox China manufactures fine china by blending clay and other alumino silicates which are coated or glazed with lead glass after an initial firing. Process wastes containing leaded glaze have been stored in an on-site basin (Glaze Basin - RCRA Facility No. NJD002325074) since the plant began operations in 1954. Lenox China intends to implement its closure plan by June 1984 in accord with (40 CFR 265.111) and in a manner which eliminates the post closure escape of hazardous constituents to the environment.

Facility Description

The Lenox China's Glaze Basin "the facility" received process wastes consisting of clay, lead carbonate, frit (low solubility lead compounds in glass form) and silica. Approximately 1,600 tons (1,200 cubic yards) of glaze having a high clay content and a total lead content of between 35 and 40 percent was deposited in the basin between 1954 and 1970. Discharge to the basin was terminated in 1970. The maximum volume of waste in the facility at any given time was approximately 1,600 tons (1,200 cubic yards.).

As the lead content of the waste has economic value, this material is periodically removed from the basin and sold to permitted smelters. However, because the feasibility of the sale and subsequent recycling of the lead waste depends on market conditions and the smelters ability to accept the waste, Lenox China's recycling activities do not follow a regular

schedule. At this time Lenox has a letter of agreement from National Smelting (Pedricktown, New Jersey) indicating its willingness to purchase the waste for recycling. It is anticipated that all negotiations will be completed, all state and local permits obtained and the waste removed and transported to National Smelting by June 1984.

The glaze basin is located near the center of the Lenox China plant site approximately 100 feet east of the main plant (manufacturing) building. The basin is rectangular in shape and measures approximately 60 by 90 feet. It extends to a depth of approximately 6 feet below land surface in unconsolidated deposits which consist primarily of fine to medium grained sand with some clay. At no time has the bottom of the facility been in contact with the water table which occurs at a depth of between 11 feet and 13 1/2 feet below land surface.

A low asphalt curb surrounds the facility and the bottom of the basin is not lined. However, tests on the glaze waste in the facility indicate that it has a vertical permeability in the range of only 1×10^{-6} cm/sec to 3×10^{-6} cm/sec. Moreover the results of an exploratory investigation conducted by Lenox China, Inc. in November 1980 to determine the extent of glaze penetration into the underlying strata indicate that there has been no measureable migration of wastes beyond the immediate confines of the basin. The results of the tests on soil/waste samples collected during this investigation are appended. A more detailed discussion of the nature (permeability) and extent of the wastes in this basin is provided in Section 4.

No waste material has been added to the glaze basin since 1970.

In recent years polyethylene sheet has been used as a temporary cover on the facility to prevent precipitation from infiltrating into the waste pile. This sheeting is the only item that will require decommissioning as there are no pumps, pipes or fixed structures associated with the facility. Some earth moving equipment is involved in the periodic recycling of waste glaze; however, this equipment is decontaminated on-site immediately after each use.

RCRA Subpart G Closure Plan (40 CFR 265.111)

After the remaining glaze waste has been removed as part of existing recycling operations, Lenox China will close the facility by removing all contaminated soil in the floor and walls of the basin. Soil(s) will be determined to be contaminated if they are found to leach lead at concentrations greater than 5.0 ppm using EP Toxicity testing procedures. In order to delineate the extent of any residual contamination requiring removal, soil samples will be collected at depth increments of 6 inches at numerous locations in the floor and walls of the basin and analyzed for their leachable lead content by a chemical laboratory certified by USEPA and the State of New Jersey.

Contaminated soil removed from the facility will be treated on-site in Lenox China's industrial waste treatment system to convert any soluble lead carbonate in the soil into insoluble lead phosphate. This treatment has been demonstrated to reduce lead concentrations in the leachate to less than 0.3 ppm. After treatment the non-hazardous soil will be disposed of at a local permitted landfill (Woodbine Landfill, Fiddler Hill Road, Wood-

bine, New Jersey) located approximately 20 miles from the plant.

When all soils contaminated by contact with the waste material have been removed, clean fill will be placed in the basin to return the area to grade and the surface will be asphalted so that it conforms with the surrounding parking lot.

Anticipated Closure Schedule

Lenox China cannot know the precise date that the Regional Administrator will approve this plan before the fact. As a result, this closure plan identifies the estimated time to achieve project milestones from the time that the Regional Administrator approves the closure plan.

Activity (Milestone)	Estimated Completion (in months after RA approval)
RA approval	0
Testing program (residual soil contamination)	3
Removal of residual contamination (soil)	4
Onsite stabilization/treatment of residual contamination	4-5
Removal of stabilized contamination to permitted landfill	5
Placement and compaction of clean fill in basin	5
Placement of an asphalt cover over filled basin	5
Physical equipment decontamination	6
Engineer certification	6

Note: Should the RA require changes in this closure plant pursuant to the EPA's review [40 CFR 265.112(c)], Lenox China may have to amend the estimated schedule.

POST CLOSURE MONITORING:

AREA OF HISTORICAL SLUDGE DEPOSITION

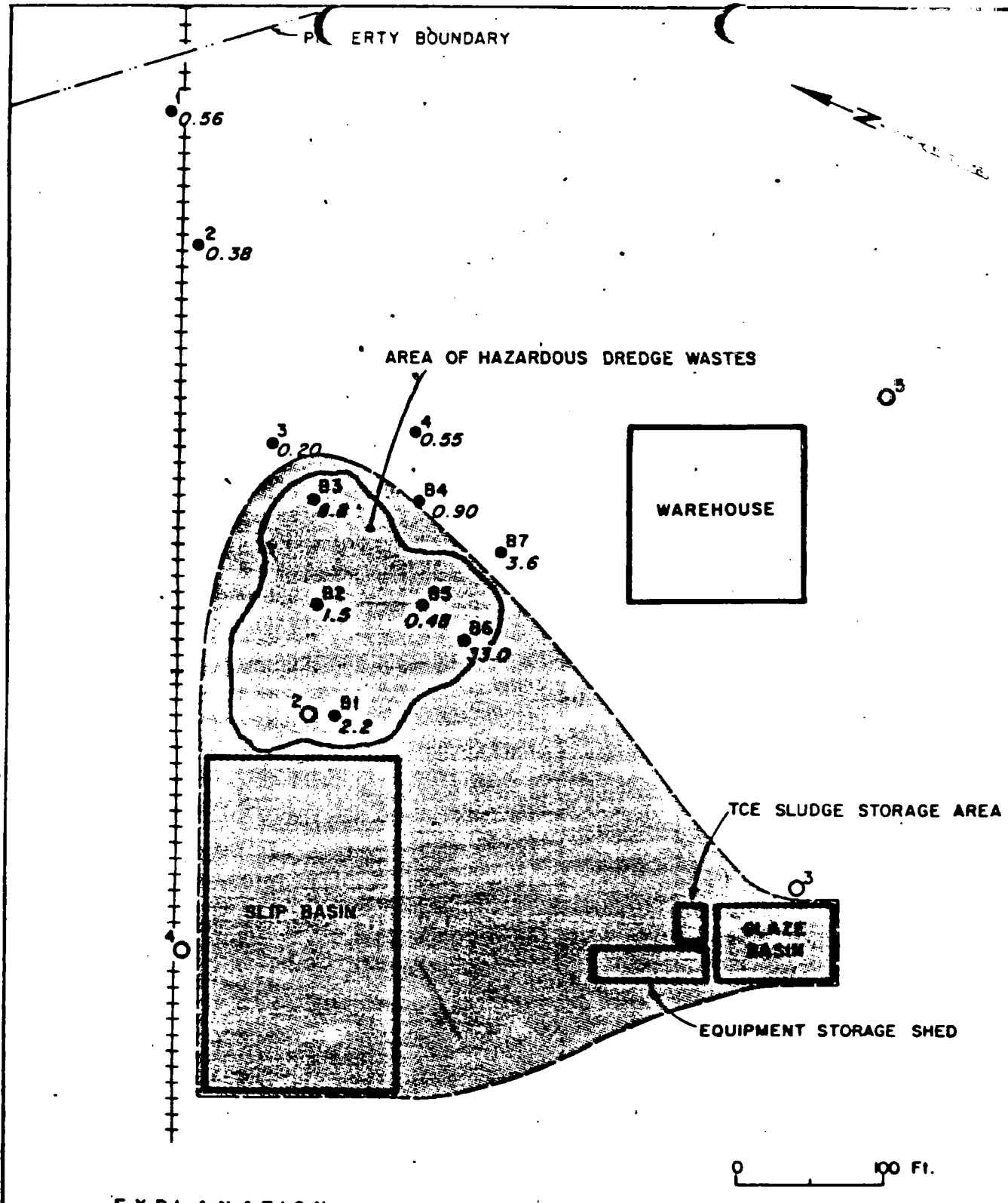
Physical Description

A small quantity of waste sludge was dredged from the slip basin during the early 1970's and spread over a limited area located immediately to the northeast of the slip basin. This area was subsequently paved (circa 1975) to accommodate an expansion of the parking facilities at the plant.

The lead content and leachability of the sludge now capped by the asphalt paving of the parking lot was determined through a soil boring, sample collection and EP toxicity testing program. The test program was conducted on February 4, 1983 to determine the extent of sludge having a leachable lead content in excess of the 5.0 ppm (parts per million) limit used to identify whether the waste is potentially hazardous.

Results of the testing program are provided in Figure 12A which shows the approximate extent of dredged sludge from which the concentrations of leachable lead exceeded the 5.0 ppm standard. The lithologic logs of the soil boring work performed for this investigation along with the results of laboratory tests performed on composite soil samples, are appended for reference.

In view of the low solubility and hence poor mobility of lead in ground-water systems, the presence of at least 10 feet of unsaturated deposits between the dredged wastes and the water table and the impermeable asphalt cover which prevents the infiltration of precipitation to the waste



EXPLANATION

O⁴ MONITORING WELL

B1— SOIL BORING LOCATION

2.2— LEACHABLE LEAD CONCENTRATION BASED ON A COMPOSITE SOIL SAMPLE (IN ppm)

HAZARDOUS WASTE STORAGE FACILITY

SUBJECT

LOCATIONS OF SOIL BORINGS AND CONCENTRATIONS OF LEACHABLE LEAD IN THE SOIL

PREPARED FOR

Pomona, New Jersey

H 34

Geraghty & Miller, Inc.	COMPILED BY E. Werth	SCALE Shown	FIGURE 12A
	PREPARED BY G. Schaffner	DATE 1-84	
	PROJECT MGR E. Werth		

material thereby eliminating any leaching action, it is reasonable to conclude that this material does not represent a threat to personal health and safety or environmental quality as long as the impermeable cover is maintained.

Post Closure Maintenance and Inspection

Lenox China will inspect, maintain, and restrict that portion of the parking lot covering the hazardous dredge wastes to light vehicles only in order to ensure the integrity (impermeability) of the asphalt surface.

Post Closure Ground-Water Monitoring

A system of ground-water monitoring wells is in place to monitor Lenox China's hazardous waste storage facilities. This system includes one well located immediately downgradient of the wastes dredged from the slip basin. Lenox is and will continue to monitor the ground water at this and the other well locations for lead, sulfate, total dissolved solids, specific conductance, and other selected constituents until such time as it has been demonstrated that there is no leaching from this facility. At such time, Lenox will request USEPA/NJDEP permission to discontinue or modify the post closure monitoring program.

SCHEDULE A.

LENOX CHINA
TILTON ROAD
POMONA, NJ 08240
EPA ID#NJD002325074

Estimated Cost of Closure (1983 Dollars)
(for Glaze Basin)

Lenox China estimates the cost of physical closure as follows:

Soil Testing Program	$ 3,300.00
Removal of Residual Soil Contamination/Treatment in Onsite Industrial Treatment Facility	207,600.00
Spill Prevention Controls	500.00
Regrade with Clean Fill	18,500.00
New Cover with Asphalt Cap to Conform with the Surrounding Parking Lot	3,600.00
Decontaminate Equipment	2,500.00
Certification by Registered Professional Engineer	1,800.00
85% for contingencies	202,100.00
	$439,900.00

Amendments/Adjustments

Closure costs are estimated as of January 10, 1984. Lenox will adjust its closure cost estimate by January 25, 1985 which is within 15 days of the anniversary date of the initial closure cost estimate.

Lenox will also adjust the closure cost estimate to reflect any significant modifications to this plan. Any such modification will be made via an attachment describing the modification, the date of modification, and any changed cost estimates.

DESCRIPTION OF SOIL SAMPLES COLLECTED

IN THE AREA NORTHEAST OF THE SLIP BASIN

AT LENOX CHINA, POMONA, NEW JERSEY

Lithologic Description	Depth Interval (inches below land surface)
Boring B1	
Sand, tan to brown, medium grained	0 - 6
Clay (waste sludge), gray to white	6 - 7
Sand and gravel, dark gray to brown	7 - 16
Clay (waste sludge) white to gray recess with pieces of brown paper	16 - 25
Sand and gravel, brown	25 - 28
Sand, brown with some brown to gray clay streaks and traces of brown paper	28 - 36
Clay, stiff, white with some tan to light brown sand	36 - 43
Sand, medium grained, orange-brown	43 - 48
Clay, stiff, grayish-brown	48 - 49
Sand, dark black staining with some gravel	49 - 54
Sand, gray to dark gray	54 - 56
Wood	56 - 59
Sand, fine grained, tannish-gray to light brown with some medium to coarse sand and gravel	59 - 72
Sand and gravel. clayey, tan to orange	72 - 90
Sand and gravel, coarse grained, gray to white with tan to brown	90 - 102
Boring B2	
Gravel with some coarse sand	0 - 8
Sand, fine to medium grained, orange interbedded with some thin streaks of brown sand and black organic material	8 - 18
Sand, fine to medium grained, orange with some gravel	18 - 34
Sand, medium to coarse grained, dark brown with some plant roots and clay	34 - 42
Sand and gravel, gray, tan, brown and orange, extremely clayey (in clay matrix)	42 - 53
Clay (waste sludge), stiff, grayish white with occassional shreds of paper	53 - 71
Sand, dark brown to dark gray with roots and assorted decaying organic material	71 - 72
Clay (waste sludge), soft, grayish-white with some orange sand and gravel	72 - 74
Sand and gravel, gray with some gray clay	74 - 90

Lithologic Description	Depth Interval (inches below land surface)
Boring B2 (Cont'd.)	
Sand and gravel, brown to orange with some pebbles	90 - 94
Clay (natural) stiff, silty with streaks of sand cemented by iron oxide	94 - 108
Boring B3	
Gravel, coarse with some coarse sand	0 - 6
Sand, fine to medium grained. orange with some pebbles	6 - 18
Sand, fine to coarse grained, interbedded with stiff lenses of orange clay	18 - 34
Clay (waste sludge), gray to white. stiff with some decaying organic matter	34 - 38
Clay (waste sludge) gray, soft	38 - 53
Sand, fine to medium grained and decaying organic matter	53 - 54
Clay (waste sludge) gray, soft	54 - 59
Sand, fine to coarse grained with decaying organic matter	59 - 65
Sand, fine to medium grained, light brown to dark brown, slightly clayey with traces of decaying organic matter	65 - 72
Clay (waste sludge) gray, soft	72 - 75
Sand, fine to coarse grained, orange to light brown with pebbles and decaying organic matter	75 - 85
Sand, fine to coarse, with some gravel, pebbles and streaks of clay	85 - 100
Clay (natural), gray, stiff, silty with streaks of sand cemented by iron oxide	100 - 103
Sand, fine to medium grained, tan to orange with thin streaks of gray clay	103 - 108
Boring B4	
Gravel, coarse with some coarse sand	0 - 6
Sand, fine to medium grained, orange with some pebbles	6 - 18
Sand, fine to coarse grained with some pebbles and thin streaks of orange clay	18 - 45
Clay (waste sludge), gray to white with interbedded layers of decaying organic matter	45 - 54
Sand, fine to medium grained, tan to black slightly clayey with decaying organic matter	54 - 62
Sand, fine to medium grained, olive green, with some pebbles and organic debris	62 - 75
Sand, medium to coarse grained, olive to tan with some pebbles and streaks of grayish-green clay	75 - 88

Lithologic Description	Depth Interval (inches below land surface)
Boring B4 (Cont'd.)	
Clay (waste sludge), gray to tan, sandy with some pebbles	88 - 90
Clay, sandy, gray to orange, stiff with interbedded streaks of sand	90 - 105
Sand, coarse grained, light brown to gray, very clayey with some gravel and pebbles	105 - 108
Boring B5	
Gravel, coarse with some coarse orange sand	0 - 6
Sand and gravel, medium to coarse grained with some pebbles and an occasional lens of orange clay	6 - 18
Sand, fine to coarse grained with some gravel and pebbles and streaks of stiff, silty, brown clay	18 - 42
Sand, fine to medium grained, clayey grayish-brown with some fine gravel	42 - 43
Clay (waste sludge), tannish-brown to white	43 - 54
Sand, fine to coarse grained, orange to brown with some gravel and pebbles	54 - 60
Sand, fine to coarse grained, black with decaying organic matter	60 - 66
Sand, fine to coarse grained, light green to olive green, clayey with pebbles and organic debris	66 - 72
Sand, medium to coarse grained, orange to brown with pebbles	72 - 79
Sand and gravel, medium to coarse grained, clayey, light gray with pebbles and organic debris	79 - 95
Sand and gravel, very coarse grained, clayey, grayish-white with numerous pebbles	95 - 108
Boring B6	
Gravel, coarse with some coarse orange sand	0 - 6
Sand, medium to coarse grained, orange with some coarse gravel	6 - 18
Sand, fine to medium grained, clayey, orange with numberous pebbles	18 - 30
Clay, sandy, gray with some pebbles	30 - 33
Clay (waste sludge), dark gray, sandy with some organic material	33 - 39
Sand, medium to coarse grained, black with organic matter and a trace of clay	39 - 41
Clay (waste sludge), dark gray, sandy with some organic material	41 - 44
Sand, fine to coarse grained, tan to brown with some gravel and pebbles	44 - 54
Sand, medium to coarse grained, tannish-green to orange with interbedded organic material	54 - 56

Lithologic Description	Depth Interval (inches below land surface)
Boring B6 (Cont'd.)	
Sand, fine to medium grained, gray to green	56 - 72
Sand. fine to coarse grained, tannish-brown to gray with pebbles, streaks of organic material and iron and oxide staining	72 - 90
Sand, fine to medium grained, gray with some silt and clay	90 - 105
Sand, fine to coarse grained with numerous pebbles	105 - 108
Boring B7	
Gravel, coarse with some coarse orange sand	0 - 6
Sand, medium to coarse grained, orange with some coarse gravel	6 - 23
Clay (waste sludge), grayish-white, stiff	23 - 25
Sand, fine to coarse grained, black with decaying organic matter	25 - 27
Clay (waste sludge), grayish-white, stiff	27 - 44
Sand, fine to coarse grained, black with traces of organic matter	44 - 45
Sand, fine to coarse grained, gray to dark brown with thin streaks of black organic matter and a 1-inch thick lense of waste sludge	45 - 54
Sand, fine to medium grained, light brown to orange with some gravel and pebbles	54 - 72
Sand, fine to coarse grained, brown to gray with pebbles, steaks of organic matter and iron oxide staining	72 - 90
Sand, fine to medium grained, gray to dark gray with some silt and grayish-white clay	90 - 108

New England Reps
Gifford Precision Eng., Inc.
P. O. Box 1017
Middletown, Conn. 06457
(203) 346-1223
(603) 632-7567

Mid-Atlantic Associates
3618 South I-85
Charlotte, N. C. 28208
(704) 392-1309

FEB 22 1983

ROSSNAGEL & ASSOCIATES INC.

Engineering & Testing Consultants

234 RT. 70
MEDFORD, N. J. 08055
(609) 654-1441

Midwestern Office
Dante Enviro. Consultants
4022 Stonehaven Rd.
South Euclid, Ohio
(216) 382-1719

Southeastern Division
250 Arizona Avenue N. E.
Atlanta, Georgia 30307
(404) 377-4248

AIR - WATER - ENERGY - INDUSTRIAL HYGIENE - NOISE - WASTE

- STACK & EXHAUST TESTING
- DESIGN OF AIR / WATER / NOISE POLLUTION CONTROL SYSTEMS
- BACTERIA & LIMNOLOGY STUDIES
- SPECIFICATIONS / DRAWINGS
- WATER / WASTE WATER / BIOASSAYS
- CHEMICAL ANALYSES
- GAS CHROMATOGRAPHY, I. R. & A. A.
- ENVIRONMENTAL IMPACT STUDIES

TEST REPORT #15,099 February 18, 1983

Certificate of Analysis Lab Report #12,876

Lenox China
Tilton Road
Pomona, NJ 08240

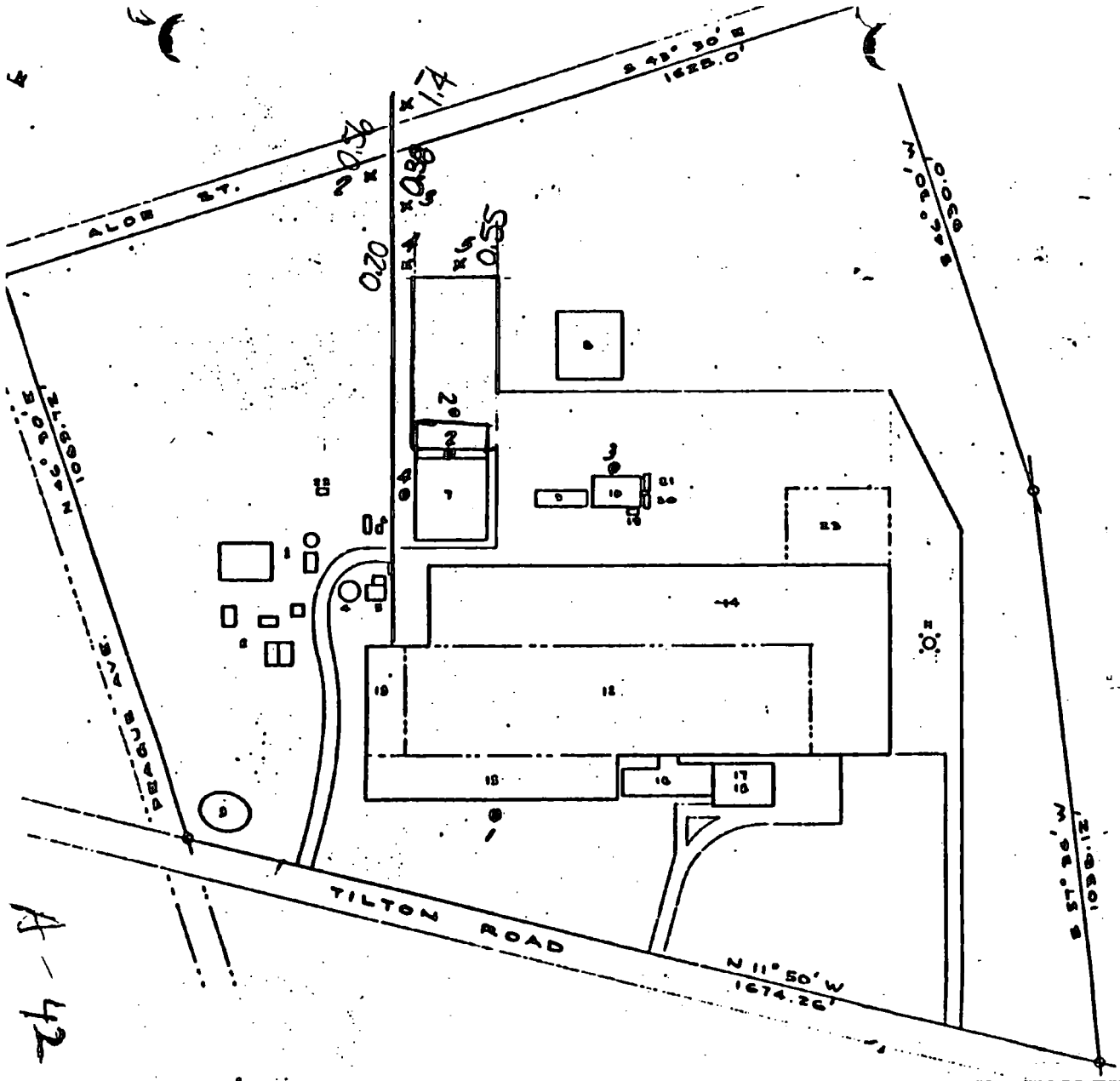
Attention: Mr. John Kinkela

The results are listed below of the analyses performed on the composite soil and sludge samples from your facility. The samples were submitted to ROSSNAGEL & ASSOCIATES on February 4, 1983.

It was requested that an EP Toxicity extraction/separation procedure be performed on each sample, followed by lead analysis on the extract. The extraction/separation procedure was performed as it appears in FEDERAL REGISTER, volume 45, No. 98 page 33127.

Sample	Lead in EP Toxicity Extract (mg/liter)	Lead Allowable Limit (mg/liter)
B-1 0-54	2.2	
B-1 72-102	.20	
B-2	1.5	
B-3	8.8	
B-4	.90	5.0
B-5	.48	
B-6 33-36	22	
B-6 36-44	43	
B-7	3.6	

TABLE I



1 - INDUSTRIAL WASTE TREATMENT PLANT (1971) SQ. FT.

2 - SEWAGE TREATMENT PLANT (1954) 215 SQ. FT.

3 - EFFLUENT POND

4 - 200,000 GAL. WATER TANK (1954)

5 - PUMP HOUSE, WELL #1, GAS METERING HOUSE (1954) 938 SQ. FT.

6 - WELL #2 (1964) 88 SQ. FT.

7 - SLIP BASIN

8 - WAREHOUSE (1969) 14,400 SQ. FT.

9 - QUONSET HUT (1954) 2028 SQ. FT.

10 - GLAZE BASIN

11 - 100,000 GAL. ELEVATED WATER TANK (1954), TANK BTM. 100 FT. FROM GRADE

12 - MANUFACTURING PLANT - ORIGINAL (1954) 144,861 SQ. FT.

13 - MANUFACTURING PLANT - ADDITION (1964) 14,366 SQ. FT.

14 - MANUFACTURING PLANT - ADDITION (1964) 150,285 SQ. FT.

15 - MANUFACTURING PLANT - ADDITION (1968) 16,430 SQ. FT.
TOTAL = 345,832 SQ. FT.

16 - OFFICE - ORIGINAL (1954) = 8[illegible]

17 - OFFICE - 1ST FLOOR ADDITION (1964) = [illegible]

18 - OFFICE - 2ND FLOOR ADDITION (1964) [illegible]

TOTAL = [illegible]

19 - 10,000 GAL. FUEL OIL STORAGE TANK (1973)

20 - 20,000 GAL. FUEL OIL STORAGE TANK (1975)

21 - 20,000 GAL. FUEL OIL STORAGE TANK (1975)

22 - WELL #3 (1976) 150 SQ. FT.

23 - ADDITION SHIPPING/STORAGE WAREHOUSE (26,572 SQ. FT.

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TOTAL AREA OF LENOX INC. PLOT = 55.98 ACRES

TITLE: SITE PLAN — POMONA N.J. PLANT (PLANT ENG. & MAINT.)	SCALE 1" = 200'-0"	DRN. HOPKINS	DATE 6/25/70	C	ADDED IT. 23
				B	ADDED ITEMS 20, 21 & 22
		APPR. [illegible]	DATE 6-25-70	A	REVISED & REDRAWN — SAME DRAWING NUMBER
TOLERANCES UNLESS SPECIFIED DEC. ± — FRAC. ± —	MATERIAL	LENOX, INC.		REV. LET.	REVISION DESCRIPTION
			DWG. No. B-1068-4		

REV. "C"

MONITORING WELL LOCATION

SHOVEL DIGGING LOCATION

The general stratigraphic sequence of the major water-bearing formations occurring below the Lenox China plan is illustrated in Figure 13C.

Water-level information was collected from four on-site monitoring wells and one piezometer between October 5, 1982 and February 4, 1983, in order to determine ground-water flow conditions in the water-table aquifer. Automatic water-level recorders were installed on three monitoring wells (1, 2, and 3) to develop a data base for use in the interpretation of hydraulic gradients and the selection of an appropriate location for an additional downgradient monitoring well. Water-table contour maps developed from data collection after the installation of a fourth well are shown in Figures 13D and 13E. A summary of the water-level data is also provided at the end of this section.

Ground water on and in the immediate area around the plant site flows to the north-northeast with an apparent ground-water mound in the vicinity of the slip basin influencing local flow conditions. The location and configuration of the mound implies that some of the effluent in the slip basin is infiltrating to and recharging the water table. However, the data also suggest that pumpage from onsite supply wells screened in the lower Cohansey Sand may be affecting flow in the water-table aquifer and controlling the extent of the mound.

Based on the hydraulic gradient shown in the water-table contour maps, horizontal soil permeability values ranging from 1.75×10^{-3} cm/sec to 4.5×10^{-6} cm/sec and an average porosity value of 35 percent for the upper Cohansey Sand (Barksdale, Paulos, Sokolowski and Sartor, 1983), it is esti-

WATER-LEVEL ELEVATION DATA FOR MONITORING

WELLS 1 THROUGH 4 AND PIEZOMETER 5

Well/ Piezometer No.	Elevation of Top of Casing (feet above plant datum)	Elevation of the Water Table (feet above plant datum)			
		10-5-82	10-26-82	11-23-82	2-4-83
1	107.32	92.83	92.16	91.93	94.32
2	107.96	92.25	91.91	91.70	94.06
3	105.13	92.50	91.97	91.72	93.04
4	105.11	-	-	92.24	95.31
5	102.21	92.46	92.15	91.77	94.17

Note: To convert elevation from plant datum to U.S.C. and G.S. datum (mean sea level) subtract 38.04 feet.

- Indicates no data available.

SECTION 15

GROUND-WATER MONITORING DATA (40 CFR 265.90-265.94)

Ground-water samples were collected by Geraghty & Miller, Inc. from Monitoring Wells 1 through 4 between November 23 and 24, 1982, in accordance with the protocol provided in Section 14. Samples were analyzed by Measurement Sciences Corporation (Garden City, New York) which is certified in New Jersey for those parameters specified in 40 CFR 265.92 and required by the NJDEP. The results of the analyses are summarized on the following page with Monitoring Well 1 representing the background or upgradient well, Monitoring Wells 3 and 4 the downgradient wells, and Monitoring Well 2 tapping ground water beneath one of the storage facilities.

Plume Description

The available water-quality information is insufficient to determine whether a plume containing elevated concentrations of the facilities waste constituents exists in the ground water around the hazardous waste storage areas.

Although the results of future monitoring efforts could conceivably indicate increased concentrations of one or more waste stream constituents including the waste of greatest concern, lead, it is extremely unlikely that a plume of lead contamination would result in view of the chemicals very low solubility in ground water.

Results of Chemical Analyses on Samples From Monitoring Wells 1 Through 4, November 1982, Lenox China, Pomona, New Jersey
(concentrations in mg/L, except where noted)

Parameter	Well 1	Well 2	Well 3	Well 4
Arsenic	<0.002	<0.002	<0.002	<0.002
Barium	0.07	0.07	0.08	0.07
Cadmium	<0.001	0.008	<0.001	<0.001
Chromium	<0.02	<0.02	<0.02	<0.02
Lead	<0.005	60	0.016	0.048
Mercury	<0.0005	<0.0005	<0.0005	<0.0005
Selenium	<0.002	<0.002	<0.002	<0.002
Silver	0.08	<0.01	0.02	<0.01
Fluoride	<0.2	0.4	<0.2	<0.2
Nitrate	8.2	0.5	1.2	0.7
Iron	<0.05	0.08	28	0.22
Manganese	0.05	0.12	0.14	0.08
Sodium	9	35	50	24
Chloride	8	10	20	14
Total Organic Carbon	48	48	50	48
Replicate 1	47	-	-	-
Replicate 2	50	-	-	-
Replicate 3	53	-	-	-
Specific Conductance (umho/cm)	160	810	720	660
Replicate 1	160	-	-	-
Replicate 2	160	-	-	-
Replicate 3	160	-	-	-
pH (units)	4.5	4.9	5.9	4.5
Replicate 1	4.5	-	-	-
Replicate 2	4.5	-	-	-
Replicate 3	4.5	-	-	-
Total Organic Halides	0.03	0.09	0.21	0.03
Replicate 1	0.05	-	-	-
Replicate 2	0.06	-	-	-
Replicate 3	0.05	-	-	-
Sulfate	16	375	300	160
Phenols	<0.001	<0.001	0.002	<0.001
Total Dissolved Solids	78	540	550	570
COD	<20	<20	<20	<20
Endrin	<0.00002	<0.00002	<0.00002	<0.00002
Lindane	<0.0004	<0.0004	<0.0004	<0.0004
Methoxychlor	<0.01	<0.01	<0.01	<0.01
Toxaphene	<0.0005	<0.0005	<0.0005	<0.0005
2.4-D	<0.01	<0.01	<0.01	<0.01
2.4,5-TP	<0.001	<0.001	<0.001	<0.001
Alpha (pCi/L)	<2	<2	<2	<2
Beta (pCi/L)	4 - 2	10 - 2	19 - 3	9 - 2
Radium, Total (pCi/L)	<2	2 - 1	<2	<2

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SECTION 16

DETECTION MONITORING PROGRAM (40 CFR 264.98)

Lead (total) and trichloroethylene are the two hazardous waste materials handled and stored at the Lenox plant (see Section 2). The concentration limits for these hazardous wastes in ground water are as follows:

Constituent	Concentration Limit	Reference
Lead and Compounds	0.05 milligrams/liter	Table 1, 40 CFR 264.94
Trichloroethylene	50.0 micrograms/liter	*

* This chemical is not regulated by the State of New Jersey or the Federal Government at this time. A concentration of 50 ppb is currently being used by the NJDEP as a guideline concentration to protect the public health. Although this value will be used to gauge any detected concentrations, it does not have any statutory significance.

In addition to these two chemicals the remaining two rounds of detection monitoring will also include the list of constituents identified in Section 14. Details of the ground-water monitoring system used in conjunction with the waste storage facility monitoring program(s) are also provided in Section 14.

Results of the November 1982 ground-water sampling round (detection monitoring) collected in accordance with the procedures specified in Section 14 show that the hazardous waste lead occurs in samples from Monitoring Wells 2, 3, and 4. The value of 60 ppm reported for Well 2 must be discounted because it was subsequently determined that this well was installed within the boundaries of one of the waste storage facilities. The remaining values of 0.016 and 0.048 ppm reported for Wells 3 and 4, respectively, are below the concentration limit of 0.05 ppm provided in Table 1,

40 CFR 264.94 and therefore do not currently require the development and implementation of a corrective action program.

Should the levels of lead and trichloroethylene in ground-water samples obtained from the monitoring wells remain below the concentration limits provided below for the duration of the detection monitoring program (two additional quarterly sampling rounds), Lenox China will at the end of this period implement a compliance monitoring program in accordance with 40 CFR 264.99.

Details of the proposed compliance monitoring program are provided in Section 17.

The results of previous water-level measurements are summarized below:

Well/ Piezometer No.	Elevation of Top of Casing (feet above plant datum)	Elevation of the Water Table (feet above plant datum)			
		10-5-82	10-26-82	11-23-82	2-4-83
1	107.32	92.83	92.16	91.93	94.32
2	107.96	92.25	91.91	91.70	94.06
3	105.13	92.50	91.97	91.72	93.04
4	105.11	-	-	92.24	95.31
5	102.21	92.46	92.15	91.77	94.17

Note: To convert elevation from plant datum to U.S.C. and G.S. datum (mean sea level) subtract 38.04 feet.

- indicates no data available.

Background Ground-Water Quality/Statistical Data Evaluation

It is not currently possible to confidently characterize background levels for the various contstituents comprising Lenox China's ground-water monitoring plan based on the singular round of data that is available. Similarly the limited data base precludes the use of statistical analyses to determine whether background levels have been exceeded at downgradient locations. The limited nature of the data base stems from an unforeseen and unavoidable delay in the completion of the monitoring well network caused by the necessity to have all monitoring well locations approved prior to installation by the New Jersey Department of Environmental Protection.

It was determined upon receipt of the results of the first sampling

round, which utilized Wells 1 through 4, that Monitoring Well 2 was in fact located within the waste facility. This was confirmed by a soil boring investigation conducted in the area immediately to the northeast of the slip basin (see Section 12 for further details). In view of these findings, Lenox China proposed installing an additional monitoring well at a location outside and downgradient of the facility for the purpose of replacing Monitoring Well 2 although the latter well would still be used to obtain water-level information.

The NJDEP was advised of Lenox China's intent and the location of the proposed well on March 6, 1983. The department responded to Lenox China's request for approval on June 3, 1983 at which time the NJDEP indicated that it was not currently prepared to approve the location or authorize the installation of the replacement well but that its decision on this matter would be provided at some future time. In the interim, the NJDEP requested that Lenox proceed with the quarterly monitoring of all existing wells in continuation of the program initiated in November 1982.

Lenox China informed the NJDEP on June 13, 1983 that the existing monitoring well network was not in compliance with RCRA requirements (40 CFR 264.97) and was therefore inappropriate for regulatory monitoring purposes. Lenox reasoned that any state mandate committing company materials and resources to such a sampling program was capricious and arbitrary. The problem was discussed again with the NJDEP on August 22, 1983 at which time Lenox China again requested approval of the proposed replacement well in order to resume quarterly sampling.

Lenox China received no response from the NJDEP in connection with their reiterated request nor did Lenox receive any other form of instruction in connection with this latest appeal. As a result, no action was taken by Lenox until approval of the proposed replacement well was received from the NJDEP in the draft NJPDES initial interim permit (No. NJ 0005177) as part of the initial draft NJPDES permit issued to Lenox on November 4, 1983.

Lenox proceeded with the installation of the replacement well (Well 6) less than 10 days after receipt of NJDEP approval. The new well was installed on December 7. 1983 and the completed monitoring system (now fully in conformance with RCRA requirements) was sampled, in accordance with the procedures and protocols established in this application, on December 28, 1983. The results of this latest round of sampling (December 1983) were not received from the analyzing laboratory in time to be included in this document: however, this information will be included in Lenox China's next submission to the U.S. EPA.

A complete identification of background concentrations and evaluation of statistical significance will be performed and the results submitted as soon as one year of quarterly monitoring data has been obtained.

Lenox China

JAN 11 1985

MEMORANDUM

TO: Charles Krauss, Chief, Southern Region, DEP

FROM: James E. Hamilton, Chief, Southern Region, Enforcement Element, DEP

SUBJECT: RCRA Inspection - Lenox China
Galloway Township, Atlantic County

Attached hereto is a copy of the DEP inspection report for the joint RCRA inspection conducted at Lenox China on September 25, 1984 by John Tomasiello, Enforcement, Kathy Lapinski, DEP, BHWM, and Mary Jernigan, DEP. The following deficiencies were noted during the inspection:

1. Slip Basin - only 6" to 1' of freeboard. Also, excessive sludge in basin, must be removed.

2. Glaze Basin (lead waste) - the plastic liner should overlap the bituminous berm to prevent rain water from collecting under the liner and percolating through soil to the ground water.

In addition to the above, the analytical results (attached hereto) of samples collected during the inspection indicate the following deficiencies:

Sampling Location	Parameter	Permit Limit	Analytical Results
Well #1	TDS	500 ppm	[illegible]
Well #2	Lead	.05 ppm	[illegible] ppm (and 0.70)
Well #3	TDS	500 ppm	1,000 ppm
Well #4	Lead	.05 ppm	.054 ppm
Well #2	Iron	.3 ppm	[illegible] ppm
Well #3	Iron	.3 ppm	.838 ppm
Well #4	Iron	.3 ppm	.070 ppm
Well #2	Gross Beta Concentration	4	*2. pci/l + or - 5.

Attachment

Form ADM-012

MEMO NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

TO LABORATORY SERVICES, ATLANTIC PARKWAY, FOR DWR
SOUTHERN REGION, 147 PROSPECT STREET DATE DEC. 17, 1984

FROM GERALD NICHOLLS, Ph.D., BUREAU OF ENVIRONMENTAL LABORATORIES

SUBJECT LC#'s 41211 - 41214

The radioanalytical results for the above listed samples are transmitted herewith. If you have any questions regarding these results please contact me.

GN:jmt
cc: Dr. Eileen Hotte, Chief, BEL
Ms. Pat Gardner, BEL
Mr. Reynaldo Obed, BEL
Mr. John Tomasiello, DWR, Prospect Street

LABORATORY CONTROL NUMBER	GROSS ALPHA CONCENTRATION (pCi/l)	GROSS BETA CONCENTRATION (pCi/l)	Ra-226 CONCENTRATION (pCi/l)	LOCATION
41211	4.23 ± 4.45	5.82 ± 2.38	0.58 ± 0.19	Lenox China Well #7
41212	0.77 ± 1.89	3.43 ± 2.11	0.40 ± 0.18	Lenox China, Well #8
41213	7.27 ± 3.32	7.45 ± 2.38	0.55 ± 0.19	Lenox China, Well #6
41214	18.7 ± 7.9	28.8 ± 5.2	1.55 ± 0.27	Lenox China, Well #4
BLANK	-0.13 ± 0.51	0.25 ± 0.84	0.03 ± 0.12	
TYPICAL MINIMUM DETECTABLE ACTIVITY*	6.54	3.53	0.58	

*Please note that these samples exhibit higher than normal minimum detectable activities due to their high dissolved solids content.

Note: All uncertainties are given at the 1.96 sigma level of confidence.

Department of Environment

PLEASE TYPE OR PRINT

CHAIN OF CUSTODY

28034

Station Identification Number: SC, [ ]

YR. MO. DAY: 84 09 25

HOUR: 1930

(1) P [ ]

FIELD ANALYSIS

- ☐ Water Temp. °C. (2) P00010,
- ☐ D.O. - Winkler (3) P00300,
- ☐ D.O. Probe (4) P00299,
- ☐ pH (Field) (5) P00400,
- ☐ Sample Depth-ft. (6) P00003,
- ☐ Stream Flow-CFS (7) P00061,
- ☐ Gage Height-ft. (8) P00065,
- ☐ Spec. Conc. @ 25°C (9) P00095,
- ☐ Salinity, ‰ (10) P00480,
- ☐ Time (Hour) (11) P00211,

CONDITION CODES

- ☐ Weather Condition (12) P00041,
- ☐ Flow Severity (13) P01351,
- ☐ _____ (14) P0[illegible],
- ☐ _____ (15) P0[illegible],

NUTRIENTS

☐ HIGH ☐ LOW

- ☐ [illegible] (16) P00615,
- ☐ [illegible] (17) P00630,
- ☐ [illegible] (18) P00610,
- ☐ Total Phosphorus (19) P00625,
- Ortho-PO4 [illegible] P00660,
- Phosphorus Total [illegible] P00665,

BACTERIOLOGICAL – DILUTIONS (REQUESTED)

	10	1	-1 10	-2 10	-3 10	-4 10	-5 10	-6 10
Fecal Coliform / Total Coliform								
Fecal Streptococci								

- Fecal coli #100 ml ☐ MPN (24) P31615, ☐ MF (25) P31613,
- ☐ Fecal Strept MPN/100ml (26) P31677,
- ☐ Tot coli MPN/100 ml (27) P31505,

BIOCHEMICAL OXYGEN DEMAND

INITIAL D.O. (mg/l) _____ SAMPLE _____

SEED _____ _____

CONC. % _____ _____

HOURS _____ _____

☐ BOD 5-DAY (28) P00310, 6-DAY (29) P[illegible],

- ☐ COD (30) P[illegible],
- ☐ TOC (31) P[illegible], 3.3

- ☐ Color Pt-Co Units (32) P[illegible],
- ☐ Turbidity (33) P[illegible],
- ☐ Suspended Solids (34) P[illegible],
- ☐ Suspended Solids Ash (35) P[illegible],
- ☐ Tot Solids (36) P[illegible],
- ☐ Tot Solids Ash (37) P[illegible],
- ☐ Tot Dissolved Solids (TDS) (38) P[illegible], 660

- ☑ pH (LAB) (39) P00403, 6.05
- ☐ Alkalinity as $CaCO_3$ (40) P00410,
- ☐ Min. Acidity as $CaCO_3$ (41) P00436,
- ☐ Chloride (42) P00940,
- ☐ MBAS (43) P38260,
- ☐ Phenols (44) P32730,
- ☐ Hardness - tot as $CaCO_3$ (45) P00900,
- ☐ Sulfate (46) P00945,
- ☐ Oil & Grease (47) P00556,
- ☐ Petroleum Hydrocarbons (48) P45501,
- ☐ Cyanide (49) P00720,

- ☐ Aluminum, tot (50) P01002,
- ☐ Cadmium, tot (51) P[illegible],
- ☐ Chromium, tot (52) P01034,
- ☐ Cobalt, tot (53) P[illegible],
- ☐ Copper, tot (54) P[illegible],
- ☐ Iron, tot (55) P[illegible],
- ☐ Lead, tot (56) P[illegible],
- ☐ Manganese, tot (57) P01055,
- ☐ Nickel, tot (58) P[illegible],
- ☑ Silver, tot (59) P01051, 12
- ☐ Zinc, tot (60) P01092,

ADDITIONAL ANALYSIS

- ☐ _____ P[illegible],
- ☐ _____ P[illegible],
- ☐ _____ P[illegible],
- ☐ _____ P[illegible],

REPORT SUBMITTED

NOV 21 1984

NJDOH-Environmental Chemistry Laboratory

RESULTS mg/l unless otherwise noted

Part 1 (White) - Water Quality Inventory Copy

Part 2 (Canary) - Laboratory Copy

REJECTION OVERRIDE REQUESTED

Do not reject sample for preservation

notification from D.E.P.

Part 3 (Pink) - Laboratory Copy

Part 4 (Goldenrod) - [illegible] Copy

B-5

1-11-4

NJDEP INSPECTION FORM

Report Prepared for:

Generator ☒

Transporter ☐

HWM (TSD) facility ☒

DWR

Facility Information

Name: LENOX CHINA, INC.

Address: TILTON ROAD

POMONA, 08240

Lot: 1 Block: 453

County: ATLANTIC

Phone: (609) 641-3700 (EXT. 3:

EPA ID#: NJD002325074

Date of Inspection: 9/25/84

Participating Personnel

State or EPA personnel: JOHN TOMASIELLO, DWR

MARY JERNIGAN, HWM, KATHRIN CA... DWR

FRANK KUSSO & AL KYLE CONDUCTED MON. WELL SAMPLING FOR DWR

Facility personnel: JOSEPH A. SKLADANEK, PLANT ENGIN...

ALSO: BILL SIMMONS RE: INSPECTION & HARRY REIST RE: PERSONNEL TRAINI...

Report Prepared by Name: MARY JERNIGAN

Region: SOUTHERN (I)

Telephone #: (609) 859-2958

Reviewed by: TD

Date of Review: 12/2/84

[redacted]

Attachment C-1

		YES	NO	N/A
7:14A-6.3(a)2	How many monitoring wells are installed hydraulically down gradient?	Yes	—	—

If yes, specify how many and the depth of each.

#2 - 20' Deep - 20' of Screen in Waste area where spoils were previously Land Filled.
#3 - 25.9' - 20' Screen
#4 - 26.' - " "
#6 - 28.3' - 20' Screen
#7 - 24.0' - " "
#8 - 28.2 - " "

7:14A-6.4(a)	Does the owner/operator have a groundwater sampling and analysis plan?	Yes	—	—

If no, please explain.

7:14A-6.4(a)	Does the plan include procedures and techniques for:			
	1. Sample collection Yes Yes	Yes	—	—
	2. Sample preservation and shipment Yes	Yes	—	—
	3. Analytical procedures Yes	Yes	—	—
	4. Chain of custody Yes	Yes	—	—

7:26-11.3 Surface Impoundments

Describe the design and operating features of the surface impoundment to prevent groundwater contamination (e.g., liner leachate collection system).

(Clarifier) ~~Slop Basin~~ Periodic dredging of Slop Basin (Primary Clarifier) and Polishing Lagoon. Also Tilton Rd. Pond as needed. ~~This~~ Solids form and impermeable liner and thickening - some solids are always left under dredging to form liner.

~~Polishing Lagoon~~

~~Tilton Road Pond~~

Give the approximate size of surface impoundments (gallons or cubic feet). Please specify the types of waste stored and treated.

Slop Basin (Clarifier) 1.2 mg
Polishing Pond - 0.4 mg
Tilton Road Pond 0.115 mg

7:26-11.3(a)	Is there at least 2 feet of freeboard in the impoundment?	✓	✓	—

Clear Basin - (Stored Yes30-dowd waste sludge) Slop Basin (Primary Clarifier) 6" - 1' of Freeboard also excessive sludge in basin.
The plastic liner should overlap polishing Lagoon & Tilton Road Pond liners the bituminous berm to prevent 2' plus of freeboard.
rainwater from collecting
under the liner & percolating ~~through~~ NOTE: Sludge should be

Summary of Findings

Facility Description and Operations

Lenox China, Inc. manufactures fine china from kaolin material, clay and naphthalene sulfonate are used for the body of the china and molded via plaster. This is fired and glazed with glass formed from lead compounds. The etching shop is where pattern and designs are added to complete the manufacture of the china. Lenox China, Inc., Pomona is the largest fine china manufacturing facility in the United States.

Describe the activities that result in the generation of hazardous waste.

Waste oil is generated from compressor and vacuum pump oil changes and from machinery lubrication. Lead waste is generated from the forging operation. Trichloroethylene is used in the acid etch phase of production, where chrome is dipped into the solvent to remove the resist. The resultant sludge is piped directly to drums.

Identify the hazardous waste located on site, and estimate the approximate quantities of each. (Identify Waste Codes)

Slip basin ≈ 8,000 yds3 clay & lead (D008, (lead 1-2% by weight)
Glaze basin ≈ 1200 yds3 lead waste (D008,
≈(40) 55 gal. drums WASTE LEAD (D008)
(5) 30 gal. drums TRICHLOROETHYLENE SLUDGE (F001)
(1) 350 gal. tank WASTE OIL - nearly empty (X726)

GENERATOR INSPECTION CHECKLIST

Citation	Item	YES	NO	N/A
7:26-8.5	**Hazardous waste determination**			
	(a) Did the generator test its waste to determine whether it is hazardous?	X		
	Is the waste hazardous?	X		
	Is the generator determining that its waste exhibits a hazardous waste characteristic(s) based on its knowledge of the material(s) or processes used?	X		
	Has hazardous waste been shipped off site since November 19, 1980?	X		
	If yes, how many shipments, off site, have been made and describe the approximate size of an average shipment made on a monthly basis. If facility is a small quantity generator, please explain.			

TCE – ≈ 3 shipments / yr ≈ 1500 lbs./shipment
Waste Oil – 9 shipments 1983 & 84 Avg. Shipment 250 gal.
1 Waste Flam. Liq. NOS MEK 750 lbs. 1 shipment ~~[illegible]~~
Waste MonoChlorobenzene RQ (spent commercial product) 1 shipment 1450 lbs.

Citation	Item	YES	NO	N/A
7:26-7.4(a)1	Does the generator have an EPA ID #?	X		
7:26-7.4(a)4	Does each manifest have the following information? Please circle the elements missing and obtain a copy of the incomplete manifests. (List those manifests that are deficient)	X		
7:26-7.4(a)4i	The generator's name, address and phone number?	X		
7:26-7.4(a)4ii	The generator's EPA ID number?	X		
7:26-7.4(a)4iii	The transporter(s) name, address and phone number?	X		
7:26-7.4(a)4iv	The transporter(s) EPA ID number?	X		
7:26-7.4(a)4v	The name, address and phone number of the designated TSD facility?	X		
7:26-7.4(a)4vi	The TSDF's EPA ID number?	X		
7:26-7.4(a)4vii	The name, type and quantity of hazardous waste being shipped, including such particulars as may be required regarding same?	X		

C-6

1-11-4

NJDEP INSPECTION FORM

Report Prepared for:

Generator [X]

Transporter [ ]

HWM (TSD) facility [X]

Facility Information

Name: Lenox China, Inc.

Address: Tilton Road
Pomona NJ

Lot: 1 Block: 453

County: Atlantic

Phone: (609) 641-3700

EPA ID#: NJD002325074

Date of Inspection: 2/23/84

Participating Personnel

State or EPA personnel: Bruce Venner

Facility personnel: John Kinkela, Manager Facilities + Syste
Albert Gustony, Director Facilities Engineering

Report Prepared by Name: Bruce Venner

Region: I Southern

Telephone #: (609) 859 2958

Reviewed by: TD

Date of Review: 2/27/84

Attachment D-1

Summary of Findings

Facility Description and Operations

The Lenox facility is engaged in the production of fine china and glassware. There are two (2) basins on site which constitute the main reasons why the TSDF status was applied for. These surfa ~~factors~~, slip basin and glaze basin, are described in the attached document titled Waste Facility prepared by Geraghty & Miller, Inc..

Washwater used in the process is sent to the facilities industrial wastewater treatment plant The water from this plant is discharged, via NJPDES permit, to an adjacent creek. Sludge from this plant is rendered non-hazardous by the addition of a lead fixing agent (diammonium phosphate) and is then landfilled.

The other area of the facility which generates is the etching shop. TCE is used to remove the resist during the etching process. The sludge generated from this process is stored in drums in the rear of the facility.

The RCRA Part B Application, which was submitted to the State on 2/14/84, is attached to this report.

Describe the activities that result in the generation of hazardous waste.

TCE sludge generated in the etching room. Chips is dipped in TCE to remove the resist. Sludge is fed directly into drums via pipeline. NO material (waste) has been added to the surface impoundments since approx 1970. Wash-water which may contain lead is processed in the industrial WWTP and the lead is rendered insoluable by the addition of ADP.

Identify the hazardous waste located on site, and estimate the approximate quantities of each. (Identify Waste Codes)

Two (2) surface impounds on site contain material which contains lead. The slip basin contains 6000 to 8000 yds^3 of material which is 1 to 2 percent lead by weight. The glaze basin contains 1200 yds^3 of lead material which is currently ~~being~~ in the process of being recycled. (D008)

One & one half 55 gal drums of TCE sludge - approx 70-80 gals. (F001)

GENERATOR INSPECTION CHECKLIST

		YES	NO	N/A
7:26-8.5	Hazardous waste determination			
	(a) Did the generator test its waste to determine whether it is hazardous?	✓	—	—
	Is the waste hazardous?	✓	—	—
	Is the generator determining that its waste exhibits a hazardous waste characteristic(s) based on its knowledge of the material(s) or processes used?	✓	—	—
	Has hazardous waste been shipped off site since November 19, 1980?	✓	—	—
	If yes, how many shipments, off site, have been made and describe the approximate size of an average shipment made on a monthly basis. If facility is a small quantity generator, please explain.	15 shipments in 1983 + 1984 - including waste TCE sludge, waste oil, waste monochlorobenzene, and waste MEK (used for cleaning), lead NOS. Quantities very approx. 100 lbs to 22,000 lbs. per shipment.		
7:26-7.4(a)1	Does the generator have an EPA ID #?	✓	—	—
7:26-7.4(a)4	Does each manifest have the following information? Please circle the elements missing and obtain a copy of the incomplete manifests. (List those manifests that are deficient)	✓	—	—
7:26-7.4(a)4i	The generator's name, address and phone number?	✓	—	—
7:26-7.4(a)4ii	The generator's EPA ID number?	✓	—	—
7:26-7.4(a)4iii	The transporter(s) name, address and phone number?	✓	—	—
7:26-7.4(a)4iv	The transporter(s) EPA ID number?	✓	—	—
7:26-7.4(a)4v	The name, address and phone number of the designated TSD facility?	✓	—	—
7:26-7.4(a)4vi	The TSDF's EPA ID number?	✓	—	—
7:26-7.4(a)4vii	The name, type and quantity of hazardous waste being shipped, including such particulars as may be required regarding same?	✓	—	—

		YES	NO	N/A
7:14A-6.3(a)2	How many monitoring wells are installed hydraulically down gradient? 5	—	—	—
	If yes, specify how many and the depth of each. All 32 feet deep			
7:14A-6.4(a)	Does the owner/operator have a groundwater sampling and analysis plan?	✓	—	—
	If no, please explain.			
7:14A-6.4(a)	Does the plan include procedures and techniques for:			
	1. Sample collection	✓	—	—
	2. Sample preservation and shipment	✓	—	—
	3. Analytical procedures	✓	—	—
	4. Chain of custody	✓	—	—
7:26-11.3	Surface Impoundments			
	Describe the design and operating features of the surface impoundment to prevent groundwater contamination (e.g., liner leachate collection system). Impoundment is self lining clay 10^{-6} to 10^{-7} cm/sec			
	Give the approximate size of surface impoundments (gallons or cubic feet). Please specify the types of waste stored and treated. Glaze basin 60 x 90 - 1200 cu yds Slip basin - 1,500,000 or 18,500 sq ft.			
7:26-11.3(a)	Is there at least 2 feet of freeboard in the impoundment?	✓	—	—

WASTE FACILITY

Nature and Extent of Waste

Waste materials placed in the slip basin between 1954 and 1970 were limited to clay, nepheline syenite (feldspar) and flint. The discharge of process washwater containing glaze, which is 35 to 40 percent lead carbonate, to the basin began in 1970 and continued until 1981. Lenox China has determined that material currently in the slip basin has a high clay content and a total lead content of less than 2 percent. Falling head and triaxial permeameter tests (Appendix A) indicate that the vertical permeability of the sludge in the basin ranges between 10^{-6} cm/sec to 10^{-7} cm/sec which is extremely low and very close to the "working" definition of "impermeable" established by the State of New Jersey in its September 1981 proposed additions and modifications to the New Jersey Hazardous Waste Management Regulations (New Jersey Administrative Code, Title 7, Subchapter F, Chapter 26). The total area of the basin is approximately 18,500 square feet, with an estimated capacity of 1,5000,000 gallons.

Between 1954 and 1970 the glaze basin was used to store process wastes consisting of clay, lead carbonate, frit (low solubility lead compounds in glaze form) and silica. Approximately 1,600 tons (1,200 cubic yards) of glaze having a high clay content and a total lead content of between 35 and 40 percent, as determined by Lenox China, was deposited in the basin prior to 1970. Permeability tests on the glaze waste indicated values of 2.69×10^{-6} cm/sec and 1.06×10^{-6} cm/sec in the vertical direction. Although slightly higher than the values reported for the slip basin, these values

Attachment E-1

suggest that essentially no measureable infiltration is expected to occur for any rainfall that might be intercepted by the basin's 3,500 sq ft surface area. Waste discharges to the basin were terminated in 1970 at which time Lenox China initiated action to recycle this material. To date, approximately 30 tons of the waste glaze have been removed with complete removal of all the residual glaze as the ultimate objective. A detailed outline of the Lenox China closure plans is provided in Appendix B. → GET COPY

Industrial Waste Treatment Process

A schematic representation of Lenox China's industrial waste treatment system is shown in Figure 5. Treatment is initiated at an equalization sump located next to the main plant building (Figure 6) where the waste stream is mixed and floculated with calcium sulfate to suspend all of the large solids prior to being sent to a clarifier. The clarifier serves as the primary floculator for the system and removes approximately 80 to 95 percent of the particulate load from the waste stream. This unit also serves as the feeder for the vacuum filter. Sludge collected by the clarifier is treated with diamonium phosphate which combines with soluble lead carbonate to form insoluble lead phosphate. The diamonium phosphate is added as a fine liquid spray to the sludge coating the drum of the vacuum filter in order to assure full penetration and complete dispersion. The resulting sludge is essentially dewatered and leachability tests indicate that it contains less than three-tenths of 1 ppm (part per million) of lead.

The remaining liquid in the clarifier is sent to the slip basin which

acts as a primary clarifier treating [illegible] stream by sedimentation. A skimmer pump in the slip basin transfers the wastewater to a polishing basin for final clarification prior to its release into the Tilton Road pond where it mixes with the effluent from the sanitary treatment plant and is monitored for chemical and biological quality. Sludge accumulating in the slip basin (primary clarifier) and polishing basin is periodically pumped back to the vacuum filter. The treated and dewatered sludge removed from the site is not hazardous. Sludge is disposed of at a local landfill. The system handles approximately 85,000 gallons of wastewater daily and has been operating under NJPDES permit number NJ0005177 since 1974. Moreover, a glaze washwater reclamation system which eliminates any further discharge of lead bearing materials to the slip basin was recently installed. A detailed description of the equipment used in this treatment processes is provided in Figure 5.

Cleaning and Maintenance Schedules

- The Rex clarifier (estimated capacity 15,000 gallons) is pumped out, cleaned and overhauled every five years. This is scheduled to be done in July 1983 during annual shutdown of the plant. If, at any time, the clarifier becomes clogged with overfloculated sludge (polymer overfeed), the slip basin is pumped out and the sludge is broken up manually.

- The equalization sump (estimated capacity 3,600 gallons) is drained and cleaned once each year during the July plant shutdown.

- The vacuum filter (estimated capacity 250 gallons) is drained and

01-11-04

RCRA INSPECTION FOR

Report Prepared for:

Generator ☒

Transporter ☐

HWM (TSD) facility ☒

Copy of report sent to the facility ☐

Facility Information

Name: LENOX CHINA INC. (609) 641-3700.

Address: TILTON ROAD

POMONA, NJ.

County: ATLANTIC

EPA ID#: NJD 002325074

Date of Inspection: 2-2-83

Participating Personnel

State or EPA Personnel: WILLIAM LOWRY - NJDEP - DWM

RED LION OFFICE

Facility Personnel: ALBERT J. GUSTRAY - DIR. FACILITY ENGINEERING.

JOHN KINKELA - MGR OF FACILITIES SYSTEMS + PROGRAMS

Report Prepared by Name: WILLIAM LOWRY

Agency: NJDEP - DIV OF WASTE MGT.

Telephone #: 609-859-2958

Approved for the Director by: _____

F-1

Summary of Findings

Facility Description and Operations

Company produces two types of fine china. On site is a basin previously used for settling plant wash water. A section from a Geraghty & Miller Inc. report is attached which describes the use and content of this basin.

A schematic flow diagram for the plant waste water which contains lead is attached. The lead content is rendered insoluable by adding DAP (Diamenium Phosphate) to the pressed filter cake prior to disposal of this sludge at the Woodbine Landfill.

The sludges are stored in drums outside on pallets in a paved area. No containment system is in place for the drum storage area.

Plant layout also attached.

~~Facility was~~

Describe the activities that result in the generation of hazardous waste.

F001 - TCE SLUDGES GENERATED BY DEGREASING HARDENED ASPHALT COATING FROM CHINA. ASPHALT COATING APPLIED TO PROTECT CHINA FROM DAMAGE DURING ETCHING PROCESS. CHINA IS DIPPED INTO TCE TANK - SETTLED SLUDGE FED DIRECTLY TO DRUM OUTSIDE VIA PIPELINE.

Identify the hazardous waste located on site, and estimate the approximate quantities of each. (Identify Waste Codes)

NOTIFIED FOR F001 & D008

F001 - 40 FULL DRUMS OF TCE (SOLID) SLUDGE IN STORAGE OUTSIDE ON ASPHALT SURFACE - NO SECONDARY CONTAINMENT AROUND DRUM STORAGE AREA.

ICHLOROETHANOL

CAS RN: 115208 NIOSH #: KM 3850000
mf: $C_2H_3Cl_3O$; mw: 149.40

Liquid. mp: 17.8°, bp: 150° @ 765 mm, d: 1.54 @ 25°/4°, vap. press: 1 mm @ 20°, vap. d: 5.16.

SYNS:
2,2,2-TRICHLOROETHANOL
TRICHLOROETHYL ALCOHOL
2,2,2-TRICHLOROETHYL ALCOHOL

TOXICITY DATA: 3-2	CODEN:
mmo-asn 5 uL/plate/2H	CBINA8 30,9,80
orl-rat LD50:600 mg/kg	12VXA5 8,1069,68
ipr-rat LDLo:300 mg/kg	JPETAB 63,453,38
ipr-mus LD50:201 mg/kg	28ZPAK -,78,72
ipr-rbt LDLo:50 mg/kg	JPETAB 63,453,38

Reported in EPA TSCA Inventory, 1980.
THR: HIGH via ivn and ipr routes. MOD via oral route. An anesthetic. MUT data.
Disaster Hazard: Dangerous; see chlorides.

TRICHLOROETHENYLSILANE

CAS RN: 75945 NIOSH #: VV 6125000
mf: $C_2H_3Cl_3Si$; mw: 161.49

Fuming liquid. bp: 90.6°; d: 1.265 @ 25°/25°; flash p: 66°F.

SYNS:
TRICHLORO(VINYL)SILANE
TRICHLOROVINYL SILICANE
VINYLSILICON TRICHLORIDE
VINYL TRICHLOROSILANE

TOXICITY DATA: 2	CODEN:
skn-rbt 1 mg/24H	AMIHBC 10,61,54
eye-rbt 625 mg open SEV	UCDS** 1/19/72
eye-rbt 50 ug SEV	AMIHBC 10,61,54
orl-rat LD50:1280 mg/kg	AMIHBC 10,61,54
ihl-rat LCLo:500 ppm/4H	UCDS** 1/19/72
ihl-mus LD50:3160 mg/kg	HYSAAV 34,334,69
ihl-mus LC50:3020 mg/m3/4H	HYSAAV 34,334,69
scu-rbt LD50:680 mg/kg	AMIHBC 10,61,54

Aquatic Toxicity Rating: TLm96: 100-10 ppm WQCHM* 4,-,74. DOT: Flammable Liquid, Label: Flammable Liquid FEREAC 41,57018,76. Reported in EPA TSCA Inventory, 1980.
THR: MOD orl, ihl, skn. A skn, eye irr. See also chlorosilanes.
Fire Hazard: Dangerous; reacts violently with water, moist air.
Disaster Hazard: When heated to decomp it emits tox fumes of Cl^-. Will react with water or steam to produce tox and corrosive fumes.

2,2-TRICHLORO-1-ETHOXYETHANOL

CAS RN: 515833 NIOSH #: KM 4725000
mf: $C_4H_7Cl_3O_2$; mw: 193.46

Crystals, less sol in water than chloral hydrate, sol in organic solvents. d: 1.143, mp: 47.5°, bp: 116°.

SYNS:
CHLORAL ALCOHOLATE
CHLORAL ETHYLALCOHOLATE
CHLORAL, ETHYL HEMIACETAL
TRICHLOROACETALDEHYDE MONOETHYLACETAL

TOXICITY DATA: 2	CODEN:
orl-rat LD50:880 mg/kg	JPETAB 78,340,43
orl-dog LDLo:1200 mg/kg	JPETAB 78,340,43
orl-cat LDLo:500 mg/kg	JPETAB 78,340,43
orl-rbt LDLo:1100 mg/kg	JPETAB 78,340,43

Reported in EPA TSCA Inventory, 1980.
THR: MOD via oral route.
Disaster Hazard: When heated to decomp it emits tox fumes of Cl^-.

TRICHLOROETHYLAMINE

NIOSH #: KR-9850000
mf: $C_2H_4Cl_3N$; mw: 148.41

SYN: TCEA

TOXICITY DATA:	CODEN:
mmo-asn 1700 umol/L	SOGEBZ 6,220,70

THR: MUT data.
Disaster Hazard: When heated to decomp it emits very tox fumes of Cl^- and NO_x.

TRICHLOROETHYL CARBAMATE

CAS RN: 107697 NIOSH #: FD 1750000
mf: $C_3H_4Cl_3NO_2$; mw: 192.43

SYN: CARBAMIC ACID 2,2,2-TRICHLOROETHYL ESTER

TOXICITY DATA: 3	CODEN:
ipr-mus TDLo:3250 mg/kg/13W-I TFX:NEO	JNCIAM 8,99,47
ipr-mus LD50:500 mg/kg	JNCIAM 8,99,47

THR: An exper NEO. MOD ipr. See also esters, carbamates.
Disaster Hazard: When heated to decomp it emits very tox fumes of Cl^- and NO_x.

TRICHLORO ETHYLENE

CAS RN: 79-01-6 NIOSH #: KX 4550000
mf: C_2HCl_3; mw: 131.38

Mobile liquid; characteristic odor of chloroform. d: 1.4649 @ 20°/4°; bp: 86.7°; flash p: 89.6°F; lel = 12.5%; uel = 90% @ above 30°; mp: −73°; fp: −86.8°; autoign. temp.: 788°F; vap. press: 100 mm @ 32°; vap. d: 4.53.

SYNS:
ACETYLENE TRICHLORIDE
1-CHLORO-2,2-DICHLOROETHYLENE
1,1-DICHLORO-2-CHLOROETHYLENE
DOW-TRI
ETHYLENE TRICHLORIDE
NCI-C04546
TRICHLOORETHEEN (DUTCH)
TRICHLORAETHEN (GERMAN)
TRI-CLENE
TRICLORETENE (ITALIAN)
VESTROL

SKIN AND EYE IRRITATION DATA: 3	CODEN:
eye-hmn 5 ppm	JOCMA7 2,383,60
skn-rbt 500 mg/24H SEV	28ZPAK -,28,72
eye-rbt 20 mg/24HSEV	28ZPAK -,28,72

MUTATION DATA:	CODEN:
mmo-sat 100 uL/plate	NIOSH* 5AUG77
mma-sat 5 pph/2H	ARTODN 41,249,79
mma-smc 10 mL/L	MUREAV 48,173,77

Attachment T G-1

ADM-012

MEMO

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

TO Lenox China File - RCRA Subtitle C Preliminary Assessment

FROM Neil Jiorle, HSMS III DATE

SUBJECT On Site Inspection - (OSI)

On January 8, 1986, an on site inspection was conducted at Lenox China, Galloway Township, as part of the RCRA Subtitle C Grant commitment. Present from NJDEP were Richard Gervasio, Deborah Mazur and this writer.

At 0930 we met with plant engineer, Joe Skladanek, and began a tour of the Lenox facility. Preliminary monitoring equipment used by DEP personnel during the tour consisted of an HNU-Photoionization Detector, Foxboro-Organic Vapor Analyzer, and radiation detection survey meter. At no point during the inspection did the instruments register above background readings. Although some time was spent inside the main manufacturing building prior to leaving, the bulk of the inspection time was spent outside, concentrating on the Solid Waste Management Units located there.

We started at an area outside the northeast portion of the building, from which extends a pipe and valve. Periodically, the valve is opened to allow waste trichloroethylene (TCE) to drain out and collect in 30 gallon drums. The drums of TCE are then moved to a secure concrete storage pad near the glaze basin.

We went next to the glaze basin which we noted was adequately covered with a tarpaulin. According to Mr. Skladanek, this basin has not been used for some time and is being decommissioned according to the closure plan in their Part B Permit. At this time we were joined by Marilyn Gerhardt of the Atlantic County Health Department.

From here we went to the drummed TCE sludge storage area. The concrete and asphalt area is diked, relatively impermeable and drains to a sump pit that can collect spilled materials and pump them back into containers. This area appeared well maintained and very clean.

At this time, Mr. Skledanek indicated an underground pipe that carried material from the glaze basin to the slip basin is located in this area.Since the glaze basin is being decommissioned, this pipe is no longer in use. Mr. Sklandanek stated he has no information on this pipe.

We next went to the slip basin, the area appears well maintained with no visible indications of contamination. The plant waste stream leaves the building at the north corner and is pumped

Attachment H-1

to the clarifier/flocculator section of the onsite industrial waste treatment plant. Overflow from this unit goes to the slip basin where the small amount of suspended solids (total lead content less than 2%) settle out. A dredge in the slip basin periodically sends sludge from the slip basin back to the clarifier/ flocculator for further treatment.

We then observed operations in the industrial waste treatment plant where the sludge is dewatered, rendered non-hazardous by the addition of a lead fixing agent (diammonium phosphate) formed into bricks and then landfilled.

A skimmer pump in the slip basin discharges water from the top of the slip basin to the polishing basin for final settling. This water should not contain any lead, or only negligible amounts. Water flows from here to a pond near Tilton Road, then under Tilton Road to a drainage ditch. Liquid from the pond is tested for several parameters, including lead, and a NJPDES Permit exists for the discharge to the drainage ditch.

At this point in time, we entered the facility and briefly observed operations. The site inspection was concluded at this time.

HS91:ec

ADM-012

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

TO Lenox China RCRA Subtitle C File

FROM Neil Jiorle, HSMS III DATE January 23, 1986

SUBJECT Permeabilities of Clay Soils

It is understood by this writer that soil particles have good abilities to alternate certain hazardous materials and that lead is relatively immobile in soil. Also, that clays tend to have low permeabilities which will add to the attentuation abilities of the soil. Therefore, the conclusions drawn by Geraghty and Miller, and Lenox that putting the lead and clay waste into the lagoons will line the bottoms of the lagoons tend to be valid. But it should be mentioned that the permeabilities of the clay waste indicated in the Part B application may not accurately reflect the permeability of the material in situ.

It has been documentated that, for a variety of reasons, lab models of permeabilities may not always accurately reflect the permeabilities in real life situations. Lab permeabilities can vary by a factor of 100 or more from the actual permeabilities.[1].

Recommended permeability for a clay lining material should be less than 10-7 cm/sec. The lab tested range for the Lenox waste clay is 6×10^{-6} to 3×10^{-7} cm/sec.

Source:

Effects of Organic Solvents on the Permeability of Clay Soils; PB83-179978, Pg. 49.

Attachment I-1

ADM-012

MEMO

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

TO Lenox China RCRA Subtitle C File

FROM Neil Jiorle, HSMS III DATE January 23, 1986

SUBJECT Private Wells in Area

To determine the potential for drinking water contamination, the writer reviewed well logs and maps for the Pomona area at the Division of Water Resources. There are approximately 65 private wells within one square mile of Lenox China.

Att. 1

J-1

ADM-012

MEMO

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

TO Lenox China File - RCRA Subtitle C Preliminary Assessment

FROM Neil Jiorle, HSMS III DATE

SUBJECT On Site Inspection - (OSI)

On January 8, 1986, an on site inspection was conducted at Lenox China, Galloway Township, as part of the RCRA Subtitle C Grant commitment. Present from NJDEP were Richard Gervasio, Deborah Mazur and this writer.

At 0930 we met with plant engineer, Joe Skladanek, and began a tour of the Lenox facility. Preliminary monitoring equipment used by DEP personnel during the tour consisted of an HNU-Photoionization Detector, Foxboro-Organic Vapor Analyzer, and radiation detection survey meter. At no point during the inspection did the instruments register above background readings. Although some time was spent inside the main manufacturing building prior to leaving, the bulk of the inspection time was spent outside, concentrating on the Solid Waste Management Units located there.

We started at an area outside the northeast portion of the building, from which extends a pipe and valve. Periodically, the valve is opened to allow waste trichloroethylene (TCE) to drain out and collect in 30 gallon drums. The drums of TCE are then moved to a secure concrete storage pad near the glaze basin.

We went next to the glaze basin which we noted was adequately covered with a tarpaulin. According to Mr. Skladanek, this basin has not been used for some time and is being decommissioned according to the closure plan in their Part B Permit. At this time we were joined by Marilyn Gerhardt of the Atlantic County Health Department.

From here we went to the drummed TCE sludge storage area. The concrete and asphalt area is diked, relatively impermeable and drains to a sump pit that can collect spilled materials and pump them back into containers. This area appeared well maintained and very clean.

At this time, Mr. Skledanek indicated an underground pipe that carried material from the glaze basin to the slip basin is located in this area.Since the glaze basin is being decommissioned, this pipe is no longer in use. Mr. Sklandanek stated he has no information on this pipe.

We next went to the slip basin, the area appears well maintained with no visible indications of contamination. The plant waste stream leaves the building at the north corner and is pumped

Attachment H-1

to the clarifier/floc[illegible]ction of the onsite industrial waste treatment plant[illegible]w from this unit goes to the slip basin where the small [illegible] suspended solids (total lead content less than 2%) sett[illegible] A dredge in the slip basin periodically sends sludge from the slip basin back to the clarifier/flocculator for further treatment.

We then observed operations in the industrial waste treatment plant where the sludge is dewatered, rendered non-hazardous by the addition of a lead fixing agent (diammonium phosphate) formed into bricks and then landfilled.

A skimmer pump in the slip basin discharges water from the top of the slip basin to the polishing basin for final settling. This water should not contain any lead, or only negligible amounts. Water flows from here to a pond near Tilton Road, then under Tilton Road to a drainage ditch. Liquid from the pond is tested for several parameters, including lead, and a NJPDES Permit exists for the discharge to the drainage ditch.

At this point in time, we entered the facility and briefly observed operations. The site inspection was concluded at this time.

HS91:ec

EPA

POTENTIAL HAZARD[illegible] SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

I. IDENTIFICATION
01 STATE: NJ | 02 SITE NUMBER: D002325074

II. SITE NAME AND LOCATION

01 SITE NAME	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER				
Lenox China	Tilton Road				
03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Pomona (Galloway Twp)	NJ	08240	Atlantic	01	

09 COORDINATES: LATITUDE 39° 29' 18" | LONGITUDE 74° 35' 52"

10 TYPE OF OWNERSHIP: ☒ A. PRIVATE ☐ B. FEDERAL ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL ☐ F. OTHER ☐ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION	02 SITE STATUS	03 YEARS OF OPERATION
1 / 8 / 86 (MONTH DAY YEAR)	☒ ACTIVE ☐ INACTIVE	1954 (BEGINNING YEAR) / present (ENDING YEAR) ☐ UNKNOWN

04 AGENCY PERFORMING INSPECTION: ☐ A. EPA ☐ B. EPA CONTRACTOR ☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR ☒ E. STATE ☐ F. STATE CONTRACTOR ☐ G. OTHER

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
Neil Jiorle	HSMS III	NJDEP DWM/HSMA	609) 984-3239
09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO.
Richard Gervasio	Super Env. Tech.	SAA	609) 984-3015
Deborah Mazur	HSMS IV	SAA	(609 984-3017
Marilyn Gerhardt	Environmental Spec.	Atlantic Co. Health Dept.	609) 645-7700
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
Joe Skladanak	Plant Engineer	Tilton Rd/Pomona	609) 641-3700 X336
			( )
			( )
			( )
			( )
			( )
BLOCK 453 LOT 1			

17 ACCESS GAINED BY	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
☒ PERMISSION ☐ WARRANT	9:00 A.M.	Cold, windy

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
RCRA PA	NJDEP/Hazardous Site Mitigation Admin	609)

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
Neil Jiorle	HSMA	NJDEP - DWM	609-984-3239	1 / 14 / 86 (MONTH DAY YEAR)

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- ☐ A. SOLID
- ☐ B. POWDER, FINES
- ☒ C. SLUDGE
- ☐ D. OTHER _____ (Specify)
- ☐ E. SLURRY
- ☒ F. LIQUID
- ☐ G. GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

TONS _____

CUBIC YARDS _____

NO OF DRUMS _____

03 WASTE CHARACTERISTICS (Check all that apply)

- ☒ A. TOXIC
- ☐ B. CORROSIVE
- ☐ C. RADIOACTIVE
- ☒ D. PERSISTENT
- ☐ E. SOLUBLE
- ☐ F. INFECTIOUS
- ☐ G. FLAMMABLE
- ☒ H. IGNITABLE
- ☐ I. HIGHLY VOLATILE
- ☐ J. EXPLOSIVE
- ☐ K. REACTIVE
- ☐ L. INCOMPATIBLE
- ☐ M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS	> 1600	tons	

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently used CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
MES	Lead	7439-92-1	Surface Impoundment		
SOL	Trichloroethylene	79-01-6	Drums		

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

RCRA PA - 1/15/86 N. Jiorle

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EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
STATE | SITE NUMBER

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION
02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION

Elevated lead levels have been detected in the ground water.

01 ☐ B. SURFACE WATER CONTAMINATION
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION

N/A

01 ☒ C. CONTAMINATION OF AIR
02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION

Minimal potential during trichloroethylene transfer operations.

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION

N/A

01 ☒ E. DIRECT CONTACT
02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION

There is a very limited potential, if any, for direct contact with contaminated sludge or with trichloroethylene.

01 ☒ F. CONTAMINATION OF SOIL
02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: _____ (Acres)
04 NARRATIVE DESCRIPTION

Potential exists for lead waste in surface impoundments to leach into the soil.

01 ☒ G. DRINKING WATER CONTAMINATION
02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION

Potential exists for private wells in area to become contaminated via elevated lead levels in ground water.

01 ☒ H. WORKER EXPOSURE/INJURY
02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION

Potential for worker exposure during trichloroethylene transfers and during waste glaze removal operations.

01 ☒ I. POPULATION EXPOSURE/INJURY
02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION

Potential exists via contact with contaminated ground water.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE | 02 SITE NUMBER

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include common name(s) of species)

N/ A

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES (Spills/Runoff/Standing liquids, Leaking containers) — 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

Potential unstable containment since surface impoundments are unlined.

01 ☒ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Potential if contaminated ground water migrates offsite.

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: _____

IV. COMMENTS

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

RCRA PA - 1/15/86 - N. Jiorle

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
☐ A. NPDES	NJ0005177	1974		
☐ B. UIC				
☐ C. AIR				
☐ D. RCRA	NJD002325074			
☐ E. RCRA INTERIM STATUS				
☐ F. SPCC PLAN				
☐ G. STATE (Specify)				
☐ H. LOCAL (Specify)				
☐ I. OTHER (Specify)				
☐ J. NONE				

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
☒ A. SURFACE IMPOUNDMENT	3 areas	
☐ B. PILES		
☒ C. DRUMS, ABOVE GROUND	1 area	6 drums
☐ D. TANK, ABOVE GROUND		
☐ E. TANK, BELOW GROUND		
☒ F. LANDFILL	400	sq. ft.
☐ G. LANDFARM		
☐ H. OPEN DUMP		
☐ I. OTHER (Specify)		

04 TREATMENT (Check all that apply)

- ☐ A. INCINERATION
- ☐ B. UNDERGROUND INJECTION
- ☒ C. CHEMICAL/PHYSICAL
- ☐ D. BIOLOGICAL
- ☐ E. WASTE OIL PROCESSING
- ☒ F. SOLVENT RECOVERY
- ☐ G. OTHER RECYCLING/RECOVERY
- ☐ H. OTHER (Specify)

05 OTHER

☒ A. BUILDINGS ON SITE: 4

06 AREA OF SITE: 56 (Acres)

07 COMMENTS

Surface impoundment dimensions:
1) 60'x90'x6'
2) 100'x200'x7'
3) 60' x 90' x 6'

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

☐ A. ADEQUATE, SECURE ☒ B. MODERATE ☐ C. INADEQUATE, POOR ☐ D. INSECURE, UNSOUND, DANGEROUS

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.

Drums and leak containment area pose little or no risk to environment. Elevated lead levels have been detected in ground water beneath landfill area (parking lot).

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☐ YES ☒ NO

02 COMMENTS

VI. SOURCES OF INFORMATION (Cite specific references, e.g. state files, sample analysis, reports)

RCRA - PA - 1/15/86 - N. Jiorle

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as appropriate)

	SURFACE	WELL
COMMUNITY	A. ☐	B. ☒
NON-COMMUNITY	C. ☐	D. ☒

02 STATUS

ENDANGERED	AFFECTED	MONITORED
A. ☐	B. ☐	C. ☒
D. ☐	E. ☐	F. ☒

03 DISTANCE TO SITE

A. > 1 (mi)

B. < 1 (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

☐ A. ONLY SOURCE FOR DRINKING ☒ B. DRINKING (Other sources available) COMMERCIAL, INDUSTRIAL, IRRIGATION (No other water sources available) ☐ C. COMMERCIAL, INDUSTRIAL, IRRIGATION (Limited other sources available) ☐ D. NOT USED, UNUSEABLE

02 POPULATION SERVED BY GROUND WATER _____

03 DISTANCE TO NEAREST DRINKING WATER WELL < 1 (mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
12 (ft)	North - NE	_____ (ft)	_____ (gpd)	☐ YES ☐ NO

09 DESCRIPTION OF WELLS (Including storage, treatment, and treatment relative to production and distribution)

Production, monitoring and drinking water

10 RECHARGE AREA		11 DISCHARGE AREA	
☐ YES ☐ NO	COMMENTS	☐ YES ☐ NO	COMMENTS

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

☐ A. RESERVOIR, RECREATION DRINKING WATER SOURCE ☐ B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES ☐ C. COMMERCIAL, INDUSTRIAL ☐ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED	DISTANCE TO SITE
_____	☐	_____ (mi)
_____	☐	_____ (mi)
_____	☐	_____ (mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. 200 (NO. OF PERSONS)	B. _____ (NO. OF PERSONS)	C. _____ (NO. OF PERSONS)

02 DISTANCE TO NEAREST POPULATION

< 1 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE _____

04 DISTANCE TO NEAREST OFF-SITE BUILDING _____ (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site, e.g., rural, village, densely populated urban area)

Rural agricultural area

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION
01 STATE | 02 SITE NUMBER

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

☐ A. 10^{-6} - 10^{-8} cm/sec ☐ B. 10^{-4} - 10^{-6} cm/sec ☐ C. 10^{-4} - 10^{-3} cm/sec ☒ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

☐ A. IMPERMEABLE (Less than 10^{-6} cm/sec) ☐ B. RELATIVELY IMPERMEABLE (10^{-4} - 10^{-6} cm/sec) ☐ C. RELATIVELY PERMEABLE (10^{-3} - 10^{-4} cm/sec) ☐ D. VERY PERMEABLE (Greater than 10^{-3} cm/sec)

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH	
_____ (ft)	10' (ft)	_____	

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
24 (in)	2.5 (in)	0-1 %	North	_____ %

09 FLOOD POTENTIAL
SITE IS IN _____ YEAR FLOODPLAIN

10
☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE: A. _____ (mi)
OTHER: B. _____ (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

_____ (mi)
ENDANGERED SPECIES: _____

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS; NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS PRIME AG LAND	AGRICULTURAL LANDS AG LAND
A. < 1 (mi)	B. < 5 (mi)	C. _____ (mi)	D. < 1 (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

Site is in the Pinelands area. The terrain is basically flat. It is a rural, agricultural area. The facility is the only major industry in the immediate area. Soil in this area tends to be very sandy.

VII. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

RCRA - PA - 1/15/86 N. Jiorle

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 6 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER		No samples taken	
SURFACE WATER			
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL			
VEGETATION			
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
Foxboro - OVA	Only background levels were measured
HNU - PID	" " " " "

IV. PHOTOGRAPHS AND MAPS

01 TYPE ☐ GROUND ☐ AERIAL

02 IN CUSTODY OF _____ (Name of organization or individual)

03 MAPS ☐ YES ☐ NO

04 LOCATION OF MAPS N.JDEP-DHWM-BHWR

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA FORM 2070-13 (7-81)

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER

II. CURRENT OWNER(S) / PARENT COMPANY (If applicable)

01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER
Lenox China Divn., Lenox, Inc.		Lenox, Inc.	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	**04 SIC CODE**	**10 STREET ADDRESS** (P.O. Box, RFD #, etc.)	**11 SIC CODE**
Tilton Road		Tilton Road	
05 CITY / 06 STATE / 07 ZIP CODE		**12 CITY / 13 STATE / 14 ZIP CODE**	
Pomona, NJ 08240		Pomona, NJ 08240	

01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER
		Brown-Foreman Distillers Corp.	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	**04 SIC CODE**	**10 STREET ADDRESS** (P.O. Box, RFD #, etc.)	**11 SIC CODE**
05 CITY / 06 STATE / 07 ZIP CODE		**12 CITY / 13 STATE / 14 ZIP CODE**	

01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	**04 SIC CODE**	**10 STREET ADDRESS** (P.O. Box, RFD #, etc.)	**11 SIC CODE**
05 CITY / 06 STATE / 07 ZIP CODE		**12 CITY / 13 STATE / 14 ZIP CODE**	

01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	**04 SIC CODE**	**10 STREET ADDRESS** (P.O. Box, RFD #, etc.)	**11 SIC CODE**
05 CITY / 06 STATE / 07 ZIP CODE		**12 CITY / 13 STATE / 14 ZIP CODE**	

III. PREVIOUS OWNER(S) (List most recent first) / IV. REALTY OWNER(S) (If applicable; list most recent first)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	**04 SIC CODE**	**03 STREET ADDRESS** (P.O. Box, RFD #, etc.)	**04 SIC CODE**
05 CITY / 06 STATE / 07 ZIP CODE		**05 CITY / 06 STATE / 07 ZIP CODE**	
01 NAME	**02 D+B NUMBER**	**01 NAME**	**02 D+B NUMBER**
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	**04 SIC CODE**	**03 STREET ADDRESS** (P.O. Box, RFD #, etc.)	**04 SIC CODE**
05 CITY / 06 STATE / 07 ZIP CODE		**05 CITY / 06 STATE / 07 ZIP CODE**	
01 NAME	**02 D+B NUMBER**	**01 NAME**	**02 D+B NUMBER**
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	**04 SIC CODE**	**03 STREET ADDRESS** (P.O. Box, RFD #, etc.)	**04 SIC CODE**
05 CITY / 06 STATE / 07 ZIP CODE		**05 CITY / 06 STATE / 07 ZIP CODE**	

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART B - OPERATOR INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER

II. CURRENT OPERATOR

01 NAME	02 D+B NUMBER	04 SIC CODE
Lenox China Divn., Lenox Inc.		

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER

OPERATOR'S PARENT COMPANY

10 NAME	11 D+B NUMBER	13 SIC CODE

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	14 CITY	15 STATE	16 ZIP CODE

III. PREVIOUS OPERATOR(S) (List most recent first; provide only if different than current)

01 NAME	02 D+B NUMBER	04 SIC CODE

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

PREVIOUS OPERATORS' PARENT COMPANIES (if applicable)

10 NAME	11 D+B NUMBER	13 SIC CODE

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	14 CITY	15 STATE	16 ZIP CODE

01 NAME	02 D+B NUMBER	04 SIC CODE

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

10 NAME	11 D+B NUMBER	13 SIC CODE

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	14 CITY	15 STATE	16 ZIP CODE

01 NAME	02 D+B NUMBER	04 SIC CODE

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

10 NAME	11 D+B NUMBER	13 SIC CODE

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	14 CITY	15 STATE	16 ZIP CODE

IV. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION
01 STATE | 02 SITE NUMBER

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ C. PERMANENT WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ D. SPILLED MATERIAL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ E. CONTAMINATED SOIL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ F. WASTE REPACKAGED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ G. WASTE DISPOSED ELSEWHERE — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ H. ON SITE BURIAL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ I. IN SITU CHEMICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ J. IN SITU BIOLOGICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ K. IN SITU PHYSICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ L. ENCAPSULATION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ M. EMERGENCY WASTE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ N. CUTOFF WALLS — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ O. EMERGENCY DIKING/SURFACE WATER DIVERSION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ P. CUTOFF TRENCHES/SUMP — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Q. SUBSURFACE CUTOFF WALL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION
01 STATE | 02 SITE NUMBER

II. PAST RESPONSE ACTIVITIES (Continued)

01 ☐ R. BARRIER WALLS CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ S. CAPPING/COVERING — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ T. BULK TANKAGE REPAIRED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ U. GROUT CURTAIN CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ V. BOTTOM SEALED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ W. GAS CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ X. FIRE CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Y. LEACHATE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Z. AREA EVACUATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 1. ACCESS TO SITE RESTRICTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 2. POPULATION RELOCATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ☐ YES ☐ NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA FORM 2070-13 (7-81)

NJ 002 325 074 7C

7/26/89

CA89- JUL 2 3 1989

Louis A. Fantin, Esq.
First Assistant General Counsel,
Assistant Secretary
Lenox Incorporated
100 Lenox Drive
Lawrenceville, New Jersey 08648

Re: RCRA Facility Assessment (RFA) Report for Lenox China, Inc., Pomona, New Jersey

Dear Mr. Fantin:

As per your request, enclosed for your information is a copy of the final RCRA Facility Assessment (RFA) report for Lenox China, Inc. in Pomona, New Jersey.

The RFA report identifies the Solid Waste Management Units (SWMUs) at the Lenox China facility, which have been found during the Preliminary Assessment (PA), the Visual Site Inspection (VSI), and other inspections conducted at the facility. In addition, the report identifies the SWMUs, which are subject to further studies during the RCRA Facility Investigation (RFI). I would like to point out that the SWMUs listed in the RFA report may not represent the complete universe and any additional SWMUs found must also be investigated by Lenox China for potential releases and if necessary, for cleanup.

If you have any questions on this document, contact me at (212) 264-4479 or Andrew Park of my staff at (212) 264-8684.

Sincerely yours,

Barry Tornick, Chief
New Jersey Facilities Section
Hazardous Waste Facilities Branch

Enclosure w/o enclosure
01/08/99 - KOM

cc: L. Grayson, Chief
Bureau of Planning and Assessment, NJDEP

Irene Kropp, Chief
Bureau of Groundwater Pollution Abatement, NJDEP

bcc: Andrew Park
Barry Tornick

1c

RCRA PRIORITIZATION SYSTEM SCORING SUMMARY

FOR

(Name of Facility) Lenox China

EPA SITE NUMBER: (Number) NJD002325074

(City , (State) Pomona, NJ

SCORED BY: (Name) Andrew Park

OF (Organization) 2AWM-HWF

ON (Date) 8/19/91

GROUND WATER ROUTE SCORE	:	(SCORE)
SURFACE WATER ROUTE SCORE	:	(SCORE)
AIR ROUTE SCORE	:	(SCORE)
ON-SITE SCORE	:	(SCORE)
MIGRATION SCORE	:	(SCORE)

WS-1 GROUND WATER ROUTE

A. Is there an observed release? (Yes (45)) No (0) Possible (10)

B. Route Characteristics

1b. Depth to Aquifer (ft.) 0-20 (6) 21-75 (4) 76-150 (2) 150+ (0)

2b. Net Precipitation (in.) <-10 (0) -10 to +5 (2) +5 to +15 (4) >15 (6)

3b. Physical State Stable Solid (0) Unstable Solid (1) Powder, Ash (2) Liquid, Gas Sludge (3)

C. Containment Very Good (0) Good (1) Fair (2) Poor (3)

D. Waste Characteristics

1d. Chemical name or waste code number TCE (Name or Number)

2d. Toxicity/Persistence Value 0 (0) 3 (3) 6 (6) 9 (9) 12 (12) 15 (15) 18 (18)

3d. Quantity known? Yes (No)

Yes? Enter amount: Cu yds or tons (#)
Drums (#) (÷ 4 = cu yds)
Total (add above)

No? Is amount likely to be small Yes (1) No
Is amount likely to be large? (Yes (4)) No
Are large storage or disposal areas present? Yes (8) No
(only one yes allowed)

E. Targets

1e. Groundwater use:
Drinking water? (Yes (5)) No
Possible drinking water? Yes (4) No
Agriculture or industrial? Yes (3) No
Quality impacted? Yes (2) No
Quality not impacted? Yes (0)* No
(only one yes allowed)

2e. Distance to intake (miles) <1/2 (4) (1/2 to 1 (3)) 1 to 2 (2) 2 to 3 (1) >3 (0)

Note:
* Cannot be used of A = 45

CALCULATE GROUND WATER SCORE (S_{gw})

If A = 45, then S_{gw} equals: $\frac{A \times (2d + 3d) \times (1e^2 + 2e^2)}{479.7} = S_{gw}(a)$

If A = 0 or 10, then S_{gw} equals:

$[\ (1b + 2b + 3b) \times C\ ] + A = Q$ if Q >45, then Q = 45

$Q \times (2d + 3d) \times (1e^2 + 2e^2) / 479.7 = S_{gw}$

To calculate 3d:

If Total Equals	Then 3d Equals
1 to 10 cu yds	1
11 to 62	2
63 to 125	3
126 to 250	4
251 to 625	5
626 to 1,250	6
1,251 to 2,500	7
2,500 or more	8

If 1e or 2e equals zero, then $(1e^2 + 2e^2)$ = zero

If A = 45, then go to D and E

If A = 0 or 10, then go to B, C, D, and E

Note:

a The value 479.7 standardizes the ground water route score to a value between 0 and 100.

WS-2 SURFACE WATER ROUTE

A. Releases

1a. Is there an observed release? Yes (45) / No (0)

2a. Is there a permitted outfall? Yes (5) / No (0)

3a. Have there been permit violations? Yes (5) / No (0)

B. Route Characteristics

1b. Facility Location: Flood-Prone Area (3) / 100-year Flood Plain (2) / Other (1)

2b. 24-hour Rainfall (in.): <1.0 (0) / 1.0 to 2.0 (1) / 2.1 to 3.0 (2) / >3.0 (3)

3b. Distance to surface water (miles): <1/4 (6) / 1/4 to 1 (4) / 1 to 2 (2) / >2 (0)

4b. Physical State: Stable Solid (0) / Unstable Solid (1) / Powder, Ash (2) / Liquid, Gas Sludge (3)

C. Containment: Very Good (0) / Good (1) / Fair (2) / Poor (3)

D. Waste Characteristics

1d. Chemical name or waste code number: TCE, Lead (Name or Number)

2d. Toxicity/Persistence Value: 0 (0) / 3 (3) / 6 (6) / 9 (9) / 12 (12) / 15 (15) / 18 (18)

3d. Quantity known? Yes / No

Yes? Enter amount: Cu yds or tons (#)
Drums (#) (+ 4 = cu yds)
Total (add above)

No? Is amount likely to be small? Yes (1) / No
Is amount likely to be large? Yes (4) / No
Are large storage or disposal areas present? Yes (8) / No
(only one yes allowed)

SURFACE WATER ROUTE - Continued

E. Targets

1e.	Surface Water use:	Drinking water?	Yes (5)	No
		Possible drinking water?	Yes (4)	No
		Recreation?	(Yes (4))	No
		Agriculture or industrial?	Yes (3)	No
		Quality impacted?	Yes (2)	No
		Quality not impacted but within 3 miles?	Yes (1)*	No
		None within 3 miles?	Yes (0)*	No
			(only one yes allowed)	

2e.	Distance to intake or contact point (miles)	(≤1/2 (4))	1/2 to 1 (3)	1 to 2 (2)	2 to 3 (1)	>3 (0)
3e.	Distance to sensitive environment (miles)	≤1/2 (6)	1/2 to 1 (4)	(1 to 2 (2))		>2 (0)

Note:
* Cannot be used if A = 45

CALCULATE SURFACE WATER SCORE (S_{SW})

If 1a = 45, then S_{SW} equals: $1a \times (2d + 3d) \times (1e^2 + 2e^2 + 3e) / 549.9 = S_{SW}(a)$

If 1a = 0, then S_{SW} equals:

$$[\,(1b + 2b + 3b + 4b) \times C\,] + (2a + 3a) = Q \text{ if } Q > 45, \text{ then } Q = 45$$

$$Q \times (2d + 3d) \times (1e^2 + 2e^2 + 3e) / 549.9 = S_{SW}$$

To calculate 3d:

If Total Equals	Then 3d Equals
1 to 10 cu yds	1
11 to 62	2
63 to 125	3
126 to 250	4
251 to 625	5
626 to 1,250	6
1,251 to 2,500	7
2,500 or more	8

If 1e or 2e equals zero, then $(1e^2 + 2e^2)$ = zero

If A = 45, then go to D and E

If A = 0 or 10, then go to B, C, D, and E

Note:

a The value of 549.9 standardizes the surface water route score to a value between 0 and 100.

WS-3 AIR ROUTE

A. Releases

1a. Is there an observed, unpermitted, ongoing release? Yes (45) (No) (0)

2a. Does the facility have an air operating permit? Yes (5) (No) (0)

3a. Have there been any permit violations or odor complaints by residents? Yes (10) (No) (0)

4a. Can contaminants migrate into air? (Yes) (3) No (0)

5a. Containment Very Good (0) (Good) (1) Fair (2) Poor (3)

B. Waste Characteristics

1b. Chemical name or waste code number TCE
Name or Number

2b. Toxicity 0 (0) 1 (3) 2 (6) 3 (9)

3b. Quantity known? Yes (No)

Yes? Enter amount: Cubic yards or tons (#)
Drums (#) (+ 4 = cu. yds.)
Total (add above)

No? Is amount likely to be small? (Yes (1)) No
Is amount likely to be large? Yes (4) No
Are large storage or disposal areas present? Yes (8) No
(only one yes allowed)

C. Targets

1c. Population

Are residences located within four miles? (Yes (25)) No
Are other industries located within four miles? Yes (20) No
Are agricultural lands located within four miles? Yes (15) No
Any other situation. Yes (10) No
(only one yes allowed)

2c. Distance to sensitive environments (miles)

≤ 1/2 (6) 1/2 to 1 (4) (1 to 2 (2)) > 2 (0)

CALCULATE AIR SCORE (S_a)

If 1a = 45, then A = 45

If 1a = 0, then A = (2a + 3a) + (4a x 5a)

S_a equals: A x (2b + 3b) x (1c + 2c) / 237.15 = S_a [a]

To calculate 3b:

If Total Equals	Then 3b Equals
1 to 10 cu. yds	1
11 to 62 cu. yds	2
63 to 125 cu. yds	3
126 to 250 cu. yds	4
251 to 625 cu. yds	5
626 to 1,250 cu. yds	6
1,251 to 2,500 cu. yds	7
2,500 or more cu. yds	8

[a] The value 237.15 standardizes the air route score to a value between 0 and 100.

WS-4 ON-SITE CONTAMINATION

A. Access to site — Inaccessible (0) | Limited Access (2) | **Unlimited Access (4)**

B. Is there observed surface soil contamination? — **Yes (25)** | No (0)

C. Containment — Very Good (1) | **Good (2)** | Fair (3) | Poor (4)

Asphalted
Immobile
Some open areas

D. Waste characteristics

Chemical Name or Waste Code Number: Lead, TCE

Toxicity/Persistence Value: 0 (0) | 1 (1) | 2 (2) | 3 (3)

E. Targets

1e. Distance to residential areas — ≤ 1/4 (6) | 1/4 to 1/2 (4) | **1/2 to 1 (2)** | ≥ 1 (0)

2e. Is there on-site sensitive environment? — Yes (1) | **No (0)**

CALCULATE ON-SITE SCORE (S_o)

If A = 0, then $S_o = B \times D \times (1e + 2e)/21$

If A ≠ 0, then $S_o = A \times (B + C) \times D \times (1e + 2e)/21$ [a]

If B + C > 25, then B + C = 25

(a) The value 21 standardizes the on-site route score to a value between 0 and 100.

CALCULATE TOTAL SITE MIGRATION SCORE (S_m)

Total site score equals:

$$S_m = \sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2 + S_o^2} \,/\, 2^{(a)}$$

Note:

(a) The value 2 standardizes the site migration score to a value between 0 and 100.

NJD 002325074

The Pinelands Commission

P.O. Box 7, New Lisbon, N.J. 08064 (609) 894-9342

January 23, 1995

Frank F. Faranca, Case Manager
NJDEP
Division of Responsible Party Site Remediation
Bureau of Federal Case Management
CN 028
401 East State Street
Trenton, NJ 08625-0028

Please Always Refer To
This Application Number

RE: App. No. 85-0666.05
Block 423, Lot 1
Lenox China
Galloway Township

Dear Mr. Faranca:

This is in response to the December, 1994 RCRA Facility Investigation Addendum Report regarding the clean-up of hazardous substances on the above referenced site.

Please be advised that the report does not raise any significant issues with respect to the standards of the Pinelands Comprehensive Management Plan. It will be necessary for Lenox China to submit copies of the Corrective Measures report and any additional correspondence with DEP regarding this matter.

If you have any questions, please contact me.

Sincerely,

Todd DeJesus
Environmental Specialist

cc: Andrew Park
Stephen Lichtenstein